

# 7 Series



## Owner's Handbook



BMW A

**730i**  
**730iL**  
**740i**  
**740iL**  
**750i**  
**750iL**

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Congratulations on your choice of a BMW.

The better you are acquainted with your car, the easier you will discover driving to be. We would therefore like to offer you the following advice.

This Owner's Handbook contains important information on operating and looking after your BMW. Please read it carefully before setting out in your new car, so that you are fully familiar with the technical advantages of your BMW. It also contains useful information on care and maintenance, to maintain both the car's operating safety and its full resale value.

Wishing you many an enjoyable and safe journey

BMW AG



In the interests of continuing technical development, we reserve the right to modify designs, equipment and accessories.

Dimensions, weights and performance data quoted in this handbook are to the tolerances laid down by the German Institute for Industrial Standards (DIN). National-market versions may differ from those described here.

Fuel consumption data are according to the values available at the time of closing for press.

No claims based on data, illustrations or descriptions in this handbook will therefore be entertained. Errors and omissions excepted.

Please note that this Owner's Handbook contains descriptions of how to operate all the equipment that may be fitted to the car, including items available as optional extras.

Items marked with a large asterisk \* are not necessarily part of the car's standard equipment specification on all models or in all countries. Alternatively, they may be available only as optional extras or special accessories. Furthermore, the specification of your BMW will vary according to the items of equipment originally ordered for it. Descriptions of items of equipment not found in this handbook are given in the installation or operating instructions accompanying such items.

If you are in any doubt, please contact BMW Service for advice and assistance.

In the interests of operating reliability and safety, and also with a view to maintaining the value of your BMW, you are urged not to alter its specification in any way which could invalidate its general operating permit or depart from the manufacturer's recommendations.

**Important information for your safety**  
**For your own safety, always use parts and accessories which have been approved by BMW.**

In the case of Original BMW Parts and Accessories, you can be sure that BMW has tested and approved them as suitable for your car. BMW accepts liability for these items if installed according to its instructions.

**BMW is unable to accept any form of liability for parts, accessories or other products which it has not approved.**

BMW clearly cannot assess every product of outside origin in order to ensure that it represents no risk of injury to the user if installed or operated in conjunction with a BMW automobile. Nor can approval by an official technical inspection authority or the issue of a general operating permit by a government body provide absolute assurance that a product is entirely suitable, since the tests performed by such bodies tend to be of a more general nature only.

Original BMW Parts and Accessories and other products approved by BMW are available from BMW Service, which will gladly provide competent advice on all related matters.

## Important facts in brief



## The controls



## Operating hints



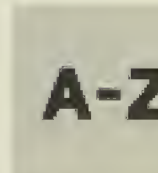
## Care and maintenance



## Technical data



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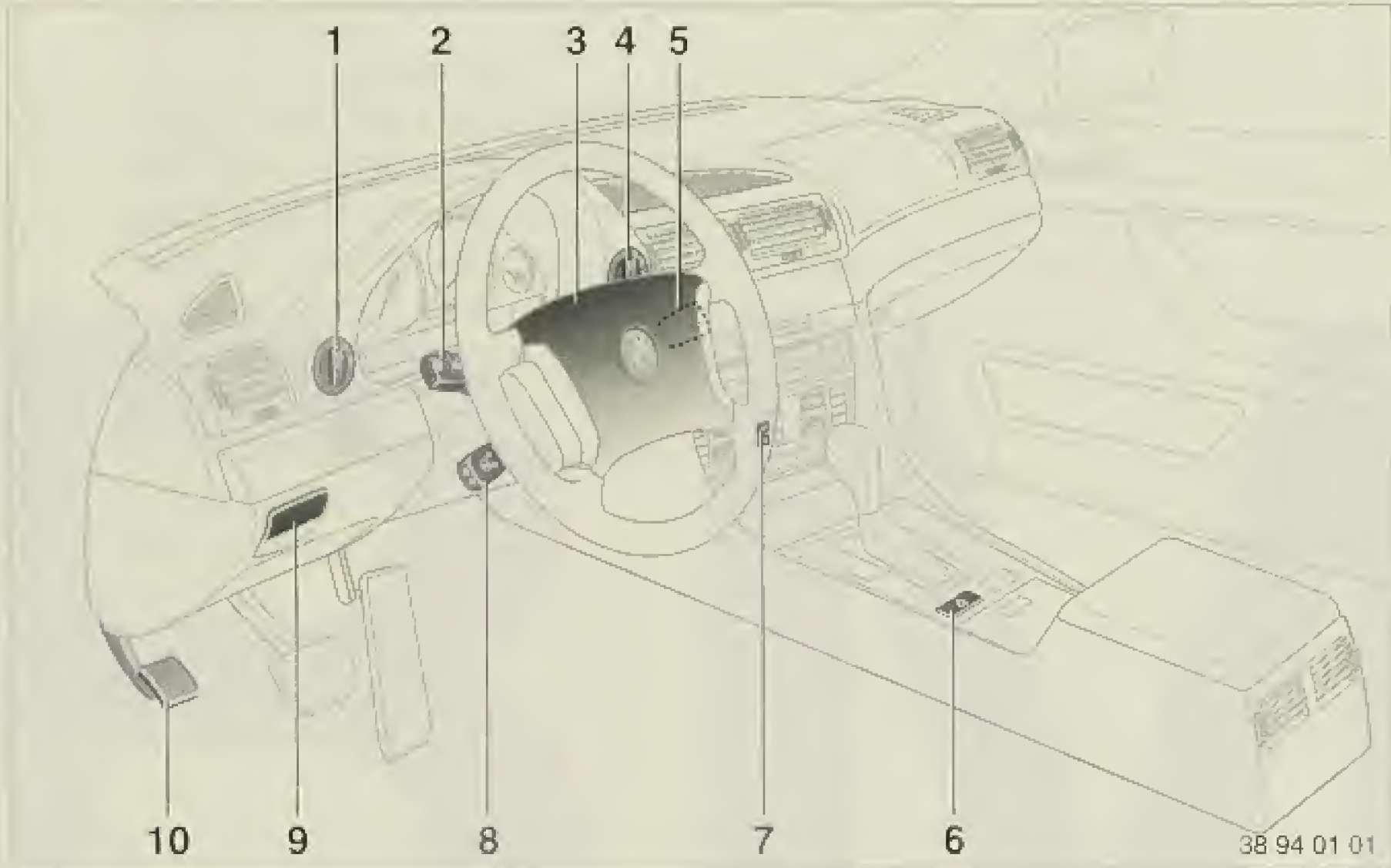




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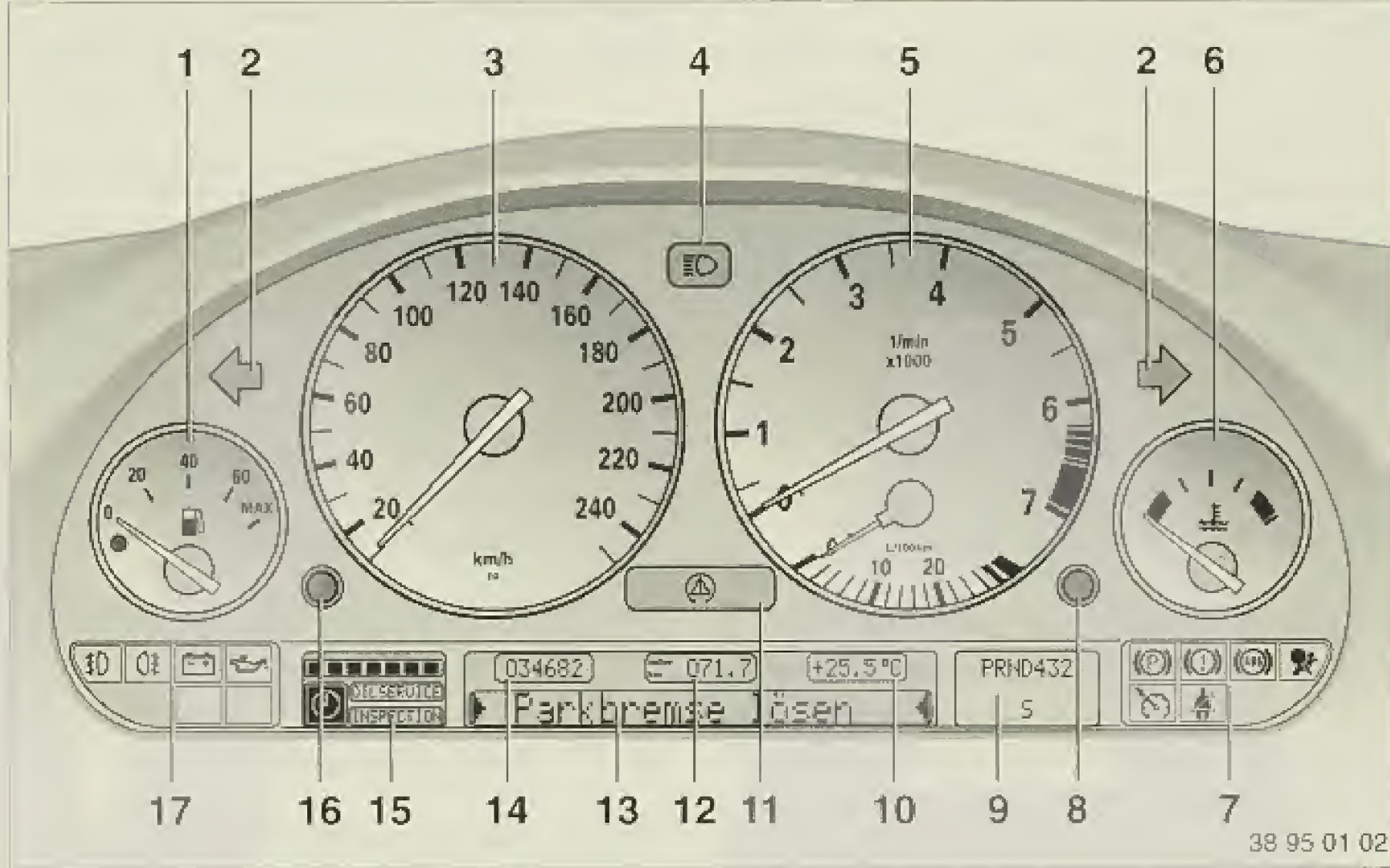


Driving area

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Instrument cluster

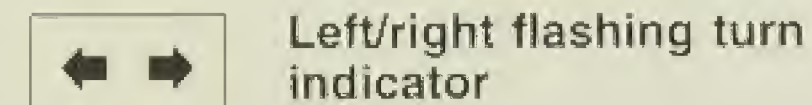
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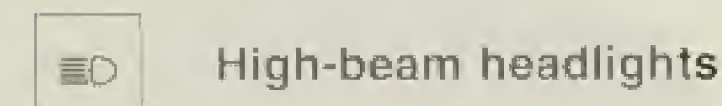
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## Telltale and warning lights



Lights up rhythmically when the flashing turn indicators are in use (also for the trailer if a trailer is being towed).

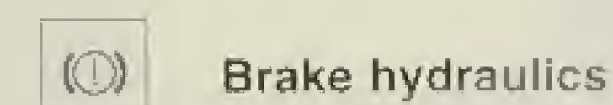


Comes on when the high-beam headlights are in use or the headlight flasher is operated.



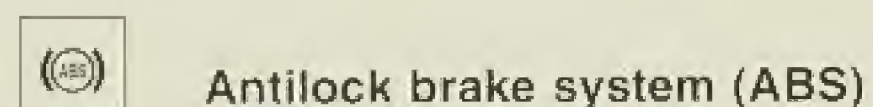
Goes out when the engine is started. Comes on when the parking brake is depressed.

Further details: Page 45



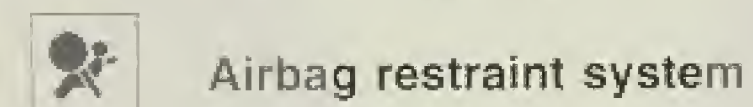
Goes out when the engine is started. If it comes on during a journey, the brake fluid level is too low.

Further details: Page 93

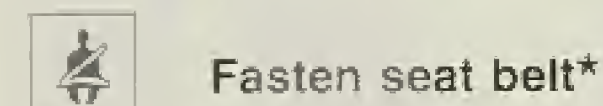


Goes out when the engine is started. If it comes on during a journey, the ABS has ceased to operate because of a malfunction. The car can still be braked in the usual way, without any loss of efficiency.

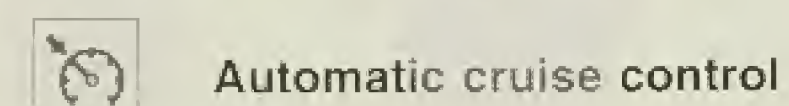
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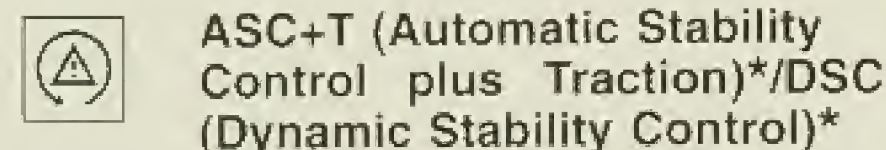
Comes on briefly, then goes out. Further details: Page 39



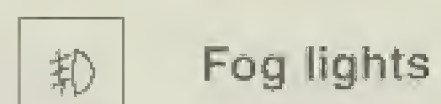
(Possibly together with acoustic signal\* and/or display\* in the Check Control.) Comes on briefly when the ignition is switched on, then goes out (depending on version, signal may go out only after the seat belt has been fastened).



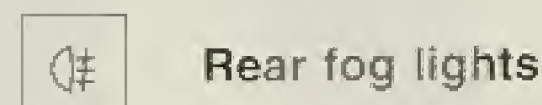
Comes on when the system is switched on. Further details: Page 78



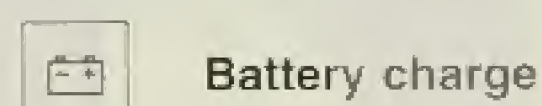
Goes out shortly after engine is started if system is in working order. Further details: Page 70



Comes on when the fog lights are switched on.



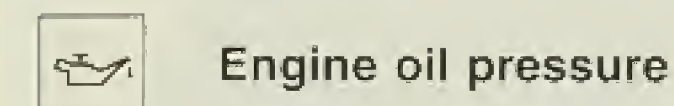
Comes on when the rear fog lights are switched on.



Goes out when the engine is started. If it comes on during a journey: The battery is no longer being charged. The alternator drive V-belt has failed or there is a fault in the alternator charge circuit.

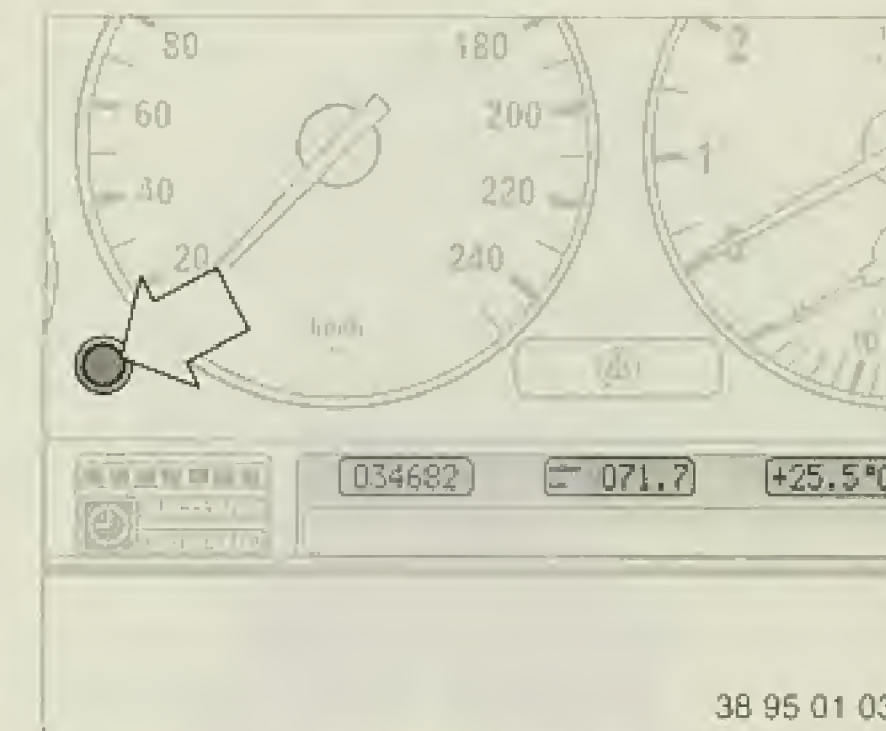
**Warning:**  
**BMW 730i/iL, 740i/iL: if the V-belt is defective, the coolant pump will not be driven, and there is a risk of the engine overheating and incurring damage.**  
Consult a BMW service station.

All models: with a defective V-belt, increased steering and braking effort will be needed.



Goes out when the engine is started. This light may come on at idle speed if the engine is hot, but should go out again at higher engine speeds.

If the light comes on during a journey and the "Stop! ENGINE OILPRESS" display appears in the Check Control: stop the car and switch off the engine at once. Check engine oil level and top up if necessary. If the oil level is correct, consult a BMW service station.



## Distance recorder/outside temperature display

**Distance recorder**  
The distance recorder shows the total distance in miles or kilometres which the car has covered.

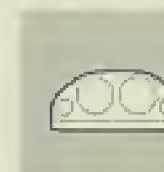
**Trip distance recorder**  
Shows distances up to 999.9 miles/km.

**Resetting to zero:**  
Press the reset knob (arrow).

**Outside temperature display**  
If the outside temperature falls below +3 °C, an ice warning signal is given and the display flashes for a short time. The temperature warning is repeated if the temperature has risen to +6 °C at least once before falling again below +3 °C.

**Important:**  
Whether or not a temperature warning is given, remember that ice can still form on the road at above +3 °C in certain circumstances, for instance on bridges and in shadow.

The displays appear in ignition position 1 and beyond. Once the displays have disappeared after the ignition has been switched off, press the reset button to call up the displays again briefly.







### Revolution counter

Never allow the engine to run in the red zone of the revolution counter.

In this zone the fuel supply is interrupted to protect the engine. This becomes evident by the ignition cutting out intermittently.



### Energy Control

Shows fuel consumption in litres per 100 km and miles per gallon.

The dial clearly indicates whether or not the car is being driven economically.

As the car slows to a halt, the needle will drift to the top end of the scale.



### Fuel gauge

When the warning light comes on, there are about 10 litres of fuel left in the tank (BMW 730i/iL, 740i/iL), or about 12 litres (BMW 750i/iL). Always refuel in good time, as running the fuel tank empty could cause damage to the engine and catalytic converters.

The warning light comes on briefly as an operating check when the ignition is switched on.

Fuel tank capacity: see Page 142.

#### Note:

Certain driving conditions (e.g. driving uphill for prolonged periods) may cause slight fluctuations in the fuel gauge reading.



### Coolant temperature gauge

Blue: the engine is cold. Drive at moderate engine and road speeds.

**Red, with "COOLANT TEMPERATURE" display in Check Control:** the engine is too hot. Switch it off at once and allow to cool down.

Pointer between the two coloured zones: normal operating temperature. At high outside temperatures or when loads on the car are severe, the pointer may move up as far as the beginning of the red zone.

Checking coolant level: Page 94.



### Service Indicator

**Green light-emitting diodes (LEDs):** the fewer are on, the sooner the next service will be due.

**Yellow LED** in conjunction with OIL SERVICE or INSPECTION: comes on when service routine is due.

**Red LED:** a service routine is overdue.

**Clock symbol** in conjunction with INSPECTION: shows that a brake fluid change is due (every two years).

#### Warning:

Periods of time in which the car's battery is disconnected are disregarded by the display's counter.

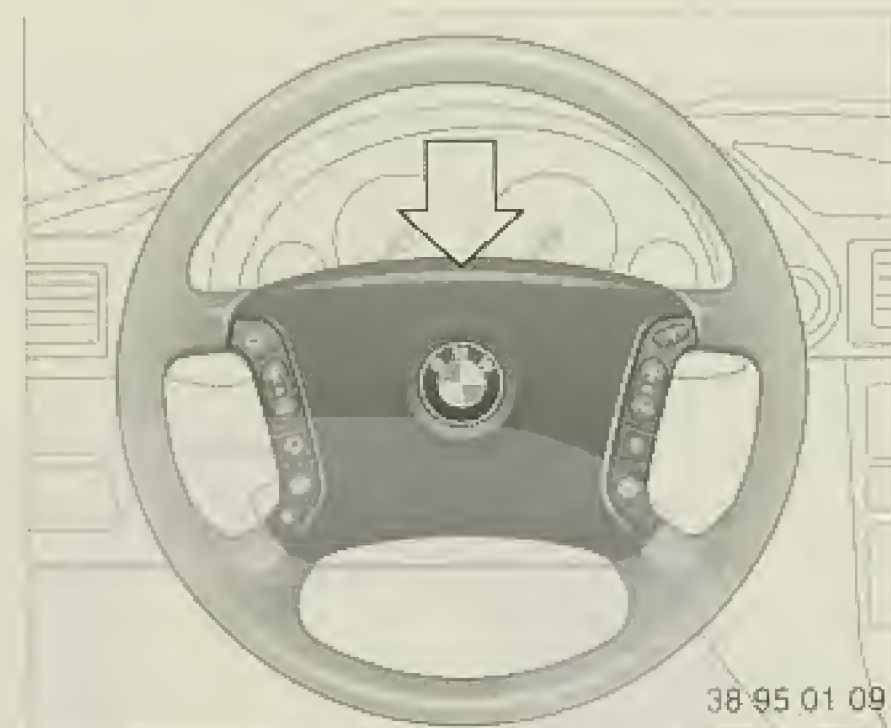
Take any such periods into account with regard to the specified brake fluid renewal intervals (two years), and do not wait until the brake fluid renewal reminder is displayed.

All displays go out after the engine has been started.

The BMW service station resets the Service Indicator to the original display after the maintenance work has been carried out.

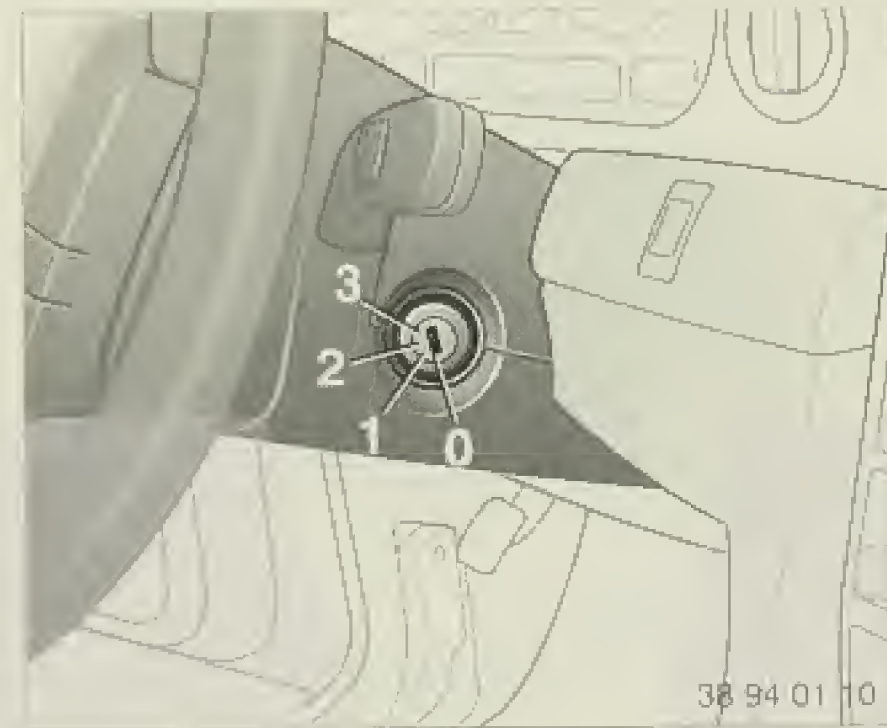
For further details, please see Page 128 and refer to the car's Service Booklet.





### Horn

Press the centre pad of the steering wheel at any convenient point.



### Ignition/starter switch and steering lock

#### 0 Steering locked

The key can only be inserted and removed in this position.

After removing the key, turn the steering wheel slightly if necessary until the steering lock engages.

Most electrical consumers are switched off, but some can still be operated: side and parking lights, inside lights, hazard warning flashers, electric seat position adjustment and cigarette lighter.

A very small electrical current flows all the time to certain items of equipment so that their memory function is maintained. Bear this in mind if the car is parked out of use for a lengthy period. In this situation, first check the battery's state of charge and recharge if necessary.

#### Note:

If the glove box, luggage compartment and inside lights have been left switched on, they cut out automatically approx. 15 minutes after the ignition key has been removed. These lights are reactivated if

- the car is locked or unlocked
- a door is opened or closed, or
- the ignition is switched on.

#### 1 Steering released

Turn the key from 0 to 1 (move the steering wheel slightly if necessary).

Other electrical consumers can be operated, for example the Multi-Information Display (MID).

### 2 Ignition switched on

All electrical consumers are ready to operate.

A well-charged battery is essential if the full benefit is to be obtained from the car's various items of electrical equipment. At idle speed and on short journeys, the battery is hardly charged at all. You are therefore recommended to switch off certain high-consumption items temporarily in traffic jams or slow-moving traffic if their use is not absolutely essential (for example seat heating or heated rear window).

### 3 Starter motor operated

#### Note – BMW 750i/iL:

Your car has a convenient starting function. It is sufficient to turn the ignition key briefly to position 3 (to operate the starter motor), then to release it.

The starter motor is then operated automatically for a certain time; it then automatically cuts out once the engine has started.

To interrupt this automatic starting procedure, simply turn the ignition key back to positions 1 or 0.

If the engine does not start at the first attempt, the procedure can of course be repeated.

If the battery voltage is low, automatic starting cannot be activated, or the function is interrupted. The engine can then be started in the usual way with the aid of jumper leads (see Page 102).

### Starting the engine

- Apply the parking brake.
- The manual-shift gear lever should be in neutral; the automatic transmission selector lever should be in P or N.
- Turn off all electrical consumers that are not needed.
- At very low outside temperatures, hold the clutch pedal down.
- Start the engine **without depressing the accelerator pedal**.

#### Other recommendations:

BMW 730i/iL, 740i/iL only:

Allow the starter motor to run for a reasonable time, but not for more than about 20 seconds. As soon as the engine fires, release the ignition key.

All models:

Do not allow the engine to warm up at a standstill, but drive off as soon as possible, using moderate engine speeds. If the engine does not start first time, for instance if it is very cold or very hot:

- Observe a slight pause before operating the starter motor again, to prevent the spark plugs from becoming wet with excess fuel.
- Turn the key back to position 1 or 0 before making a renewed attempt to start the engine. This delay will prevent the starter motor from trying to engage while the engine is still rotating.
- Depress the accelerator pedal halfway while starting the engine.

#### Warning:

**Never run the engine in an enclosed space. The exhaust gas contains carbon monoxide, which is colourless and odourless, but highly toxic. Inhaling exhaust gas constitutes a severe health risk and can lead to loss of consciousness with fatal consequences.**

**Never leave the car unattended with the engine running, as it then represents a serious potential hazard.**

### Switching off the engine

Turn the ignition key back to 1 or 0.

#### Warning:

**Never take the ignition key out when the car is still in motion, or the steering lock will engage.**

**Whenever the driver leaves the car, he or she should remove the ignition key and lock the steering.**



## Running in

While the car is being run in, the gear shift, steering etc. may be slightly stiff initially. This effect will soon disappear as the running-in process continues.

Please comply with the following instructions, which are intended to ensure that your car achieves its optimum operating life and economy.

### Engine and final drive

#### The first 2000 km (app. 1240 miles):

Drive the car at varying engine and road speeds, but do not exceed an engine speed of 4500/min or a road speed of 170 km/h (106 mile/h).

Avoid the full-throttle position of the accelerator and do not use the automatic transmission kick-down.

After 2000 km (app. 1240 miles) have been covered, engine and road speeds can be gradually increased.

If the engine or final drive is exchanged later in the car's life, please repeat the running-in procedure.

## Tyres

New tyres do not achieve their full road grip immediately, for production reasons. You should therefore drive in a restrained manner for the first 300 km (app. 200 miles).

### Brakes

Maximum brake pad friction and uniform pad surfaces are best obtained if the brakes are applied fairly firmly up to a distance of 500 km (app. 300 miles), but without violent brake applications, particularly from high speeds, or severe loads on the brakes for long periods (e.g. when descending steep mountain roads).

This distance is needed, together with the above running-in precautions, for the brake pads and discs to acquire a satisfactory initial wear and surface pattern.

The parking brake operates separately from the foot brake system, with its own drums, and therefore also has to be run in.

If the braking effect declines noticeably with time, the driver can repeat the bedding-down process provided due care is exercised:

If road surface, weather and traffic conditions permit (care must be taken not to obstruct other road users), the desired effect can be achieved by applying the parking brake lightly at about 40 km/h (25 mile/h) until definite resistance is felt. Then depress it as far as the next notch and drive the car about another 400 metres. Keep one hand on the brake release handle so that it can be released immediately if necessary. Then release the parking brake completely.

## Energy-conscious driving

Your car's technical design is ideal for economical driving at reasonable cost. Furthermore, BMW has devoted great attention to minimizing the environmental burden. To make the best possible use of these built-in design features, you are recommended to comply with the following instructions. In this way, you will reduce fuel consumption and pollutant emissions to a minimum and exert a favourable influence on engine, brake and tyre wear.

**– Do not warm up the engine with the car at a standstill. Drive away as soon as possible after starting, avoiding high engine speeds at first.**

It takes a long time for the engine to warm up at idle speed, but exhaust emissions are higher than usual until the engine reaches its normal operating temperature.

**– Always avoid long periods with the engine idling.**

Even if the delay is not expected to exceed about 1 minute, it pays to switch off the engine.

**– Use 1st gear only to move away from a standstill. Do not remain in this gear right up to peak engine speeds. Shift up in good time to a more economical gear.**

The lowest possible fuel consumption and exhaust emissions are achieved at moderate engine speeds in the highest practicable gear.

Check your BMW's fuel consumption at the Energy Control.

**– Avoid unnecessary ballast.**

Carrying items in or on the car when they are not strictly necessary increases consumption, particularly in town traffic.

**– Take off roof-mounted luggage racks or ski holders when no longer needed.**

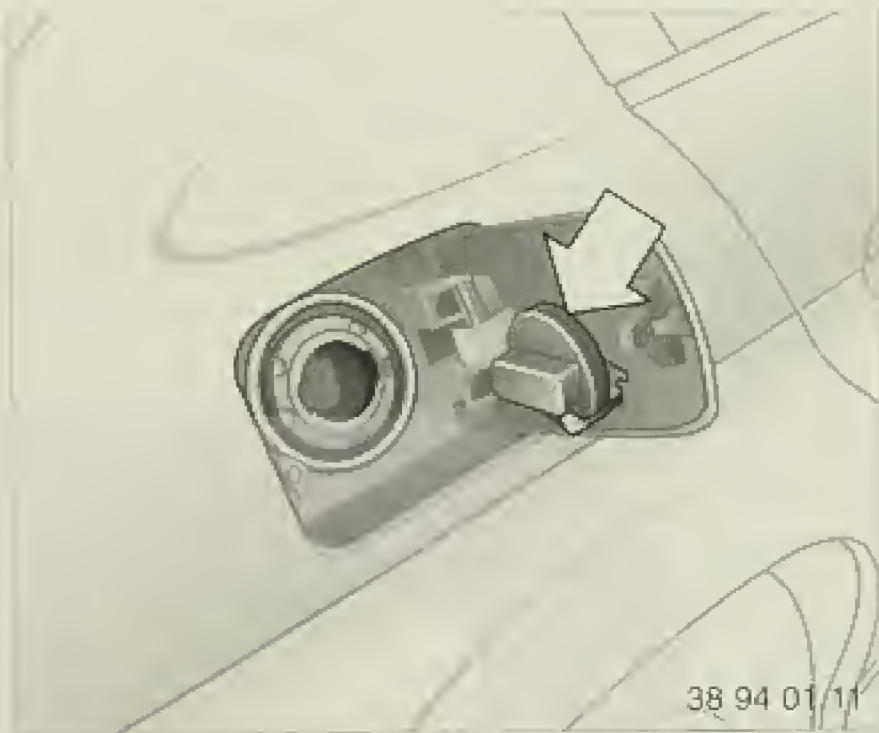
These items seriously increase aerodynamic drag and adversely affect fuel consumption, particularly at high speeds.

**– Check tyre pressures every 14 days.**

If tyre pressures are too low, the car's rolling resistance goes up. Fuel consumption suffers, tyre wear is more rapid and the car's handling deteriorates.







Refuelling

To open the fuel filler flap, press the front end in so that the flap can be lifted.

To open the filler cap inside the flap: turn it anti-clockwise, take it off and place it temporarily in the holder on the filler flap.

Note:

When refuelling, engage the filler nozzle in the mouth of the fuel tank.

If the filler nozzle is raised during refuelling,

- the supply of fuel will cut out prematurely
- on filler nozzles with fuel vapour recovery, the recirculating function will be less effective.

To close the cap: attach it to the pipe and turn clockwise as far as possible (bayonet catch).

To release the filler flap if the central locking system fails, see Page 107.

Warning:

Comply with the relevant safety regulations when handling fuel.

Fuel grade required

Since the engines have a knock control function, they can run on different grades of fuel, e.g. premium plus (octane number 98, Research Method) or regular fuel (octane number 91, Research Method). The higher the octane rating, the higher the performance and the lower the fuel consumption; the reverse is the case when fuel of a low octane rating is used. The rated performance and fuel consumption values are achieved with premium-grade fuel (95-octane, Research Method):

Cars with catalytic converter:

Premium-grade unleaded fuel to DIN EN 228 standard or equivalent, octane number 95 (Research Method). This fuel is also known as "Euro-Super".

Warning:

The use of leaded fuel will cause lasting damage to the oxygen sensor and catalytic converter.

Cars without catalytic converter (catalytic converter can be retrofitted):

Premium-grade unleaded fuel to DIN EN 228 standard or equivalent, octane number 95 (Research Method) (Euro-Super), or

premium-grade fuel to DIN 51600 standard or equivalent, octane number 98 or premium-grade fuel with octane number 95 (Research Method).

Further routine checks

- Tyre pressures (including spare wheel), twice a month 19
- Engine oil level 91
- Battery acid (top up only with distilled water) 97
- Coolant 94
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- Fluid level in washer systems 95
- Lights (change bulbs if necessary) 108

Page

Tyre pressures – check them regularly for your personal safety!

Incorrect tyre pressures can render the car unstable and lead to tyre damage or even cause an accident.

Tyre pressures in bar (gauge pressure) with tyres cold (cold = ambient temperature).

Note:

Tyre pressures rise as the tyres become hot (e.g. after a period of fast main-road driving) by app. 0.3 bar (3–4 psi). Per 10 °C of temperature change, the tyre pressure varies by app. 0.1 bar (1.4 psi).

These tyre pressures apply to makes of tyre approved by BMW and known to the BMW Service Organization.

If other makes of tyre are fitted to the car, higher tyre pressures may be needed.

Tyre pressures are also shown on the driver's door post.

When towing a trailer, always use the values for the higher load.



BMW model	Radial-ply tyres (tubeless)	2.0 (28)	2.2 (31)	2.3 (33)	2.7 (38)
730i/iL	215/65 R 16 98 W 235/60 R 16 100 W 245/55 R 16 100 W	2.0 (28)	2.2 (31)	2.3 (33)	2.7 (38)
	235/50 ZR 18 255/45 ZR 18	2.0 (38) – (–)	2.2 (31) 2.2 (31)	2.3 (33) – (–)	2.7 (38) 2.7 (38)
	215/65 R 16 98 Q/T/H M+S 235/60 R 16 100 Q/T/H M+S 245/55 R 16 100 Q/T/H M+S	2.2 (31)	2.4 (34)	2.5 (36)	2.9 (41)
740i/iL	235/60 R 16 100 W 245/55 R 16 100 W	2.1 (30)	2.3 (33)	2.3 (33)	2.8 (40)
	215/65 R 16 98 W 215/65 R 16 98 Q/T/H M+S 235/60 R 16 100 Q/T/H M+S 245/55 R 16 100 Q/T/H M+S	2.3 (33)	2.5 (36)	2.5 (36)	3.0 (43)
	235/50 ZR 18 255/45 ZR 18	2.3 (33) – (–)	2.5 (36) 2.3 (33)	2.5 (36) – (–)	3.0 (43) 2.8 (40)
750i/iL	235/60 R 16 100 W 245/55 R 16 100 W	2.2 (31)	2.4 (34)	2.5 (36)	3.0 (43)
	215/65 R 16 98 Q/T/H M+S 235/60 R 16 100 Q/T/H M+S 245/55 R 16 100 Q/T/H M+S	2.4 (34)	2.6 (37)	2.7 (38)	3.2 (46)
	235/50 ZR 18 255/45 ZR 18	2.4 (34) – (–)	2.6 (37) 2.4 (34)	2.7 (38) – (–)	3.2 (46) 3.0 (43)



## Important facts in brief

### When changing a wheel or in the event of a flat tyre

The wheels of your BMW are protected by thiefproof wheel studs. Always keep the adapter in the vehicle toolkit. This will facilitate the wheel-changing procedure at the workshop or by a breakdown recovery service. See also Page 106.

**BMW 740i/iL, 750i/iL:** if a speed of 200 km/h (124 mile/h) is not exceeded, the pressure of summer tyres may be reduced by 0.3 bar (4.3 psi) for extra ride comfort.

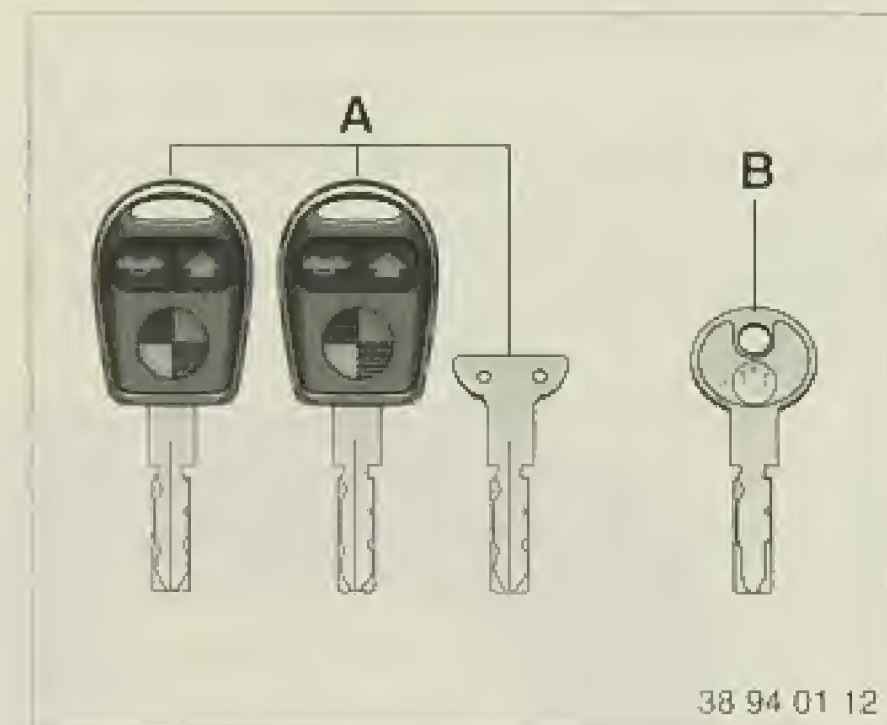
The tyre pressure must not be reduced if a trailer is being towed. The values for the higher load should be used.

## The controls

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Automatic transmission	47		







## Keys

### A. Master keys

- 2 master keys with transmitter for radio remote control.
- Spare key to keep in a safe place, e.g. in a purse or wallet

### B. Key for doors and ignition

This key does not operate the luggage compartment (see Page 27) or glove box lock.

### Obtaining a new key:

Contact a BMW service station. The key number is on a tag which is supplied to you together with the car's keys. Please keep this tag in a safe place.



## Radio remote control

Point the remote control at the vehicle (max. 20 metres away, or possibly further in certain physical conditions).

### Unlocking: press button 1.

- The LED (3) comes on briefly
- The central locking and thiefproofing device are released
- The immobilizing device is de-activated
- The alarm system is de-activated
- The car's inside lights are switched on.

### Note:

Take care not to operate the buttons unintentionally, otherwise the car could inadvertently be unlocked.

### Convenient opening:

To open the windows and sliding/tilt roof, hold button 1 depressed. The opening procedure starts after about 2 seconds and the LED flashes meanwhile. The opening procedure is interrupted as soon as the button is released.

### Closing and thiefproofing: press button 2.

- The LED comes on briefly
- The central locking is engaged.
- The thiefproofing device is engaged
- The immobilizing device is activated
- The alarm system is activated.

After thiefproofing, the LED on the top of the instrument panel remains on for 10 seconds.

### Note:

If the vehicle's power supply is restored after the battery has run flat (e.g. by means of jump-starting), the immobilizing device means that the engine can only be started if the vehicle has first been unlocked with the key or remote control. The LED on the top of the instrument panel continues to flash until this requirement has been satisfied.

To de-activate the tilt alarm sensor (see Page 30): press button 2 again briefly after engaging the thiefproofing system.

### Convenient closing circuit:

To close the windows and sliding/tilt roof, hold button 2 depressed. The closing procedure will start after a delay of app. 2 seconds and the LED flashes meanwhile.

### Warning:

During the closing process, check that there is no danger of fingers etc. being trapped. The closing process is interrupted immediately when the button is released.

### Note:

If the convenient closing procedure is interrupted, the vehicle must be unlocked again by means of button 1 before the convenient closing operation can be continued by holding button 2 depressed.

### Switching on inside lights:

Press button 2 with the vehicle locked. Subject to the remote control's maximum operating range, this function can be used to locate your car on a large car park, for example.

### Opening the luggage compartment: press key 4

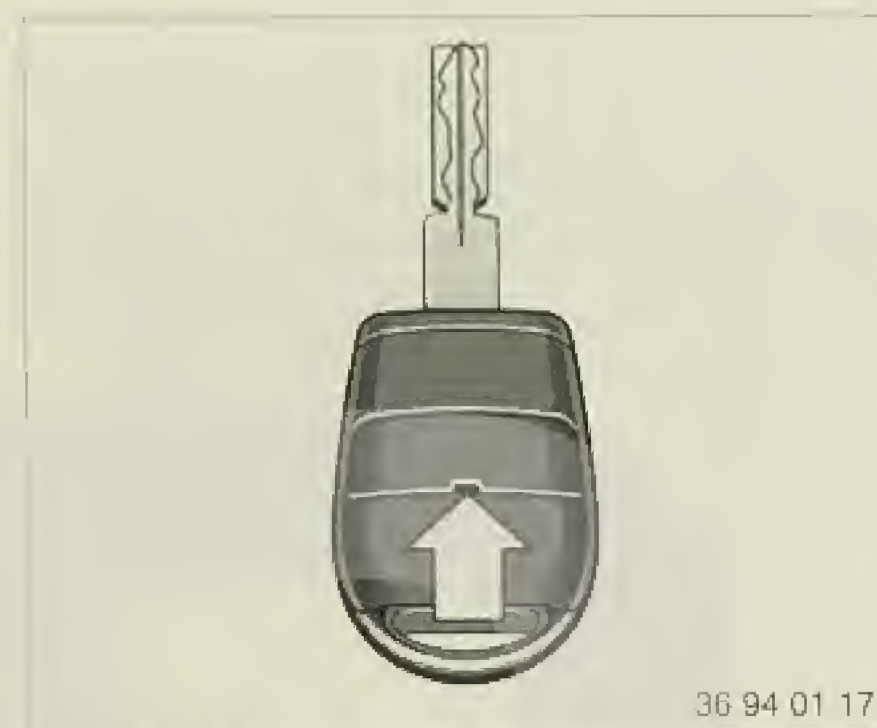
The luggage compartment lid is opened slightly, regardless of whether the luggage compartment was locked or unlocked.

### Warning:

On some national versions, the alarm system can only be operated by the remote control. The alarm will be triggered off if the master key is used to open the car.



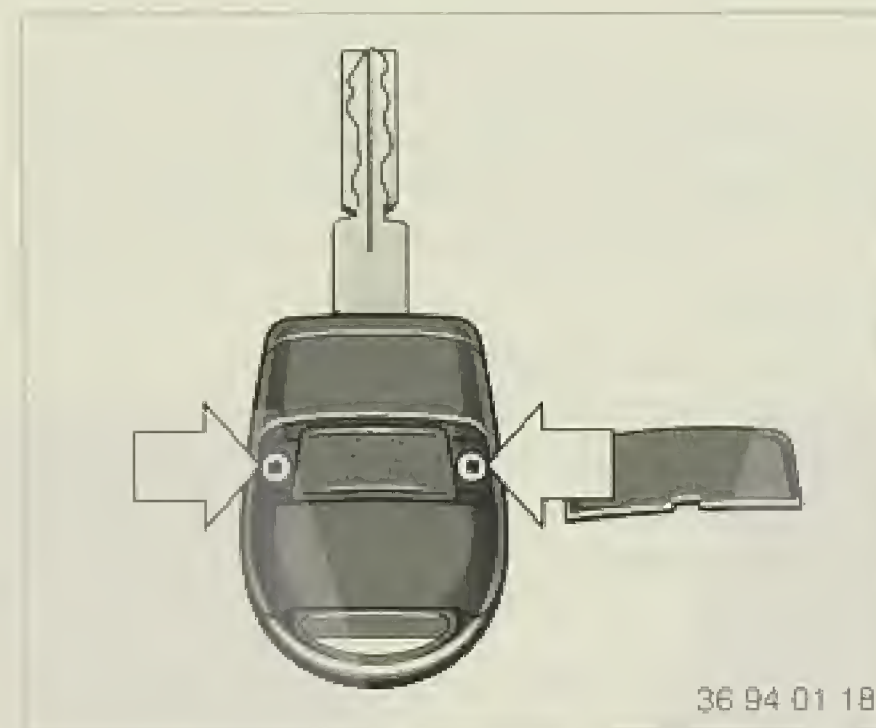




### Batteries

Renew key batteries if "REMOTE KEY BATTERY" appears in the Check Control display. In addition, the LED no longer comes on when a button is pressed, the convenient opening/closing no longer works and the remote control can no longer be initialized.

Lever off the cover by inserting a screwdriver blade at the cutout (arrow).



### Note:

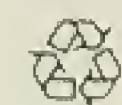
If the battery change takes less than one minute and none of the buttons is pressed, the transmitter does not need to be initialized.

Loosen the two screws (arrows) and take off the cover.

The battery type and the correct installed position are marked on the base of the battery compartment.

### Warning:

**Use only batteries of the stated type.**



Dispose of old batteries at an authorized collecting point or hand them back to a BMW service station.



### Initializing the remote control

Whenever a battery is changed, the remote-control transmitter must be initialized again (unless the battery change took less than 1 minute and none of the buttons was pressed). The same procedure must be followed if a new transmitter is brought into use (for example, to replace a lost or defective one):

- Enter the car and close the driver's door.
- Turn the ignition key briefly in the steering lock (for not more than 5 seconds) to position 1, then back to position 0.
- Press button 1 on the remote control (see illustration) and hold it down. Press button 2 briefly three times in succession within 10 seconds, while button 1 is held down. Release button 1; the LED will flash.

- The central locking system indicates that initialization has been performed successfully by closing and releasing the locks in rapid succession.

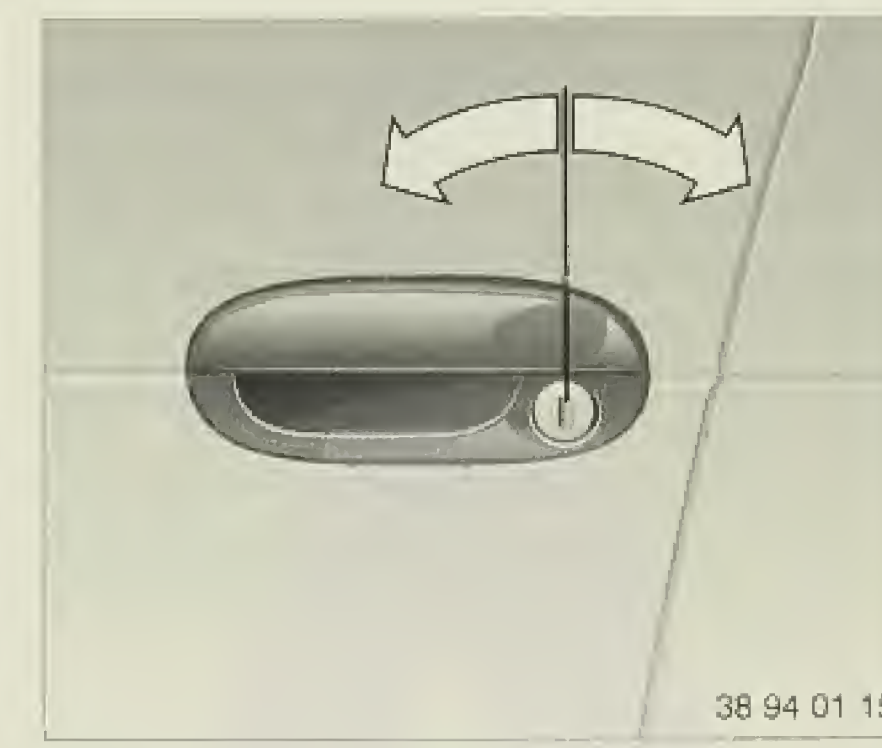
If the central locking system does not respond as described, repeat the initialization routine.

If you use additional remote-control transmitters for the same car, each of them (up to four) must also be initialized within a further 30 seconds. The steering wheel lock must not be touched during this time.

In the event of faults, contact your BMW service station, which can also supply replacements.

### Note:

Every key can be copied, and in the same way the radio signal from the remote control can itself be imitated. However, the code changes automatically each time the device is operated, and this together with the initialization process ensures maximum protection against misuse. Despite this, keep the radio remote control in a safe place to prevent unauthorized access to it, e.g. if the car is taken to the workshop or entrusted to a hotel reception, always provide only key B or the spare key for operating the doors and ignition.



### Doors

#### Central locking system

When the driver's door is closed, the doors, luggage compartment and fuel filler flap are released or locked by operating

- the driver's door lock or
- the luggage compartment lock or
- the central locking pushbutton (see Page 27).

The thiefproofing system for the locks and the immobilizing device are simultaneously activated; on vehicles with an anti-theft alarm system, this is also activated or deactivated.

### Warning:

**On certain national versions, the anti-theft alarm system can only be operated via the remote control.**

**If the master key is used to unlock such models, the alarm will be triggered off.**

After thiefproofing, the LED on the top of the instrument panel remains on for 10 seconds.

### Note:

If the vehicle's power supply is restored after the battery has run flat (e.g. by means of jump-starting), the immobilizing device means that the engine can only be started if the vehicle has first been unlocked with the key or remote control. The LED on the top of the instrument panel continues to flash until this requirement has been satisfied.

The key can only be taken out of the driver's door lock in the vertical position. If the thiefproofing system is activated, the car cannot now be opened by raising the inside door lock buttons.

The engine cannot be started with the vehicle immobilization system activated.

In the event of an accident, the central locking system is released automatically, and the hazard warning flashers and inside lights are switched on.





**Warning:**

Do not lock the car with the remote control or keys if anyone is to remain in the car, because the doors cannot then be unlocked from the inside.

For further details of the anti-theft alarm system, see Page 29.

**Convenient operation of the windows and sliding/tilt roof by way of the door lock**

**Opening:** when the door is closed, turn the key in the door lock to the "release" position and hold it there.

**Closing:** when the door is closed, turn the key to the "locking" position and hold it there.

Release the key to halt the movement.

**Emergency operation**

(in the event of an electrical malfunction) Turn the key in each case until the pressure point is sensed and overcome.

**Opening doors from the outside:**

Raise the flap handle.

**Unlocking and opening doors from the inside:**

- Either unlock all doors at the central locking pushbutton (see next page) and then operate the door handle above the armrest or
- Pull the door handle twice (the first time to unlock the door, the second time to open it).

**Locking doors from the inside:**

- Either lock all doors at the central locking pushbutton or
- Push down the lock catches in the doors. These catches remain in position when the doors are closed (except on the driver's door).

When the driver's door is open, it cannot be locked by pushing down the lock catch to safeguard against being locked out of the car inadvertently.

**Warning:**

Do not lock the doors from the inside by means of the door catches during a journey, as doors locked in this way are not automatically released in the event of an accident.

**Warning:**

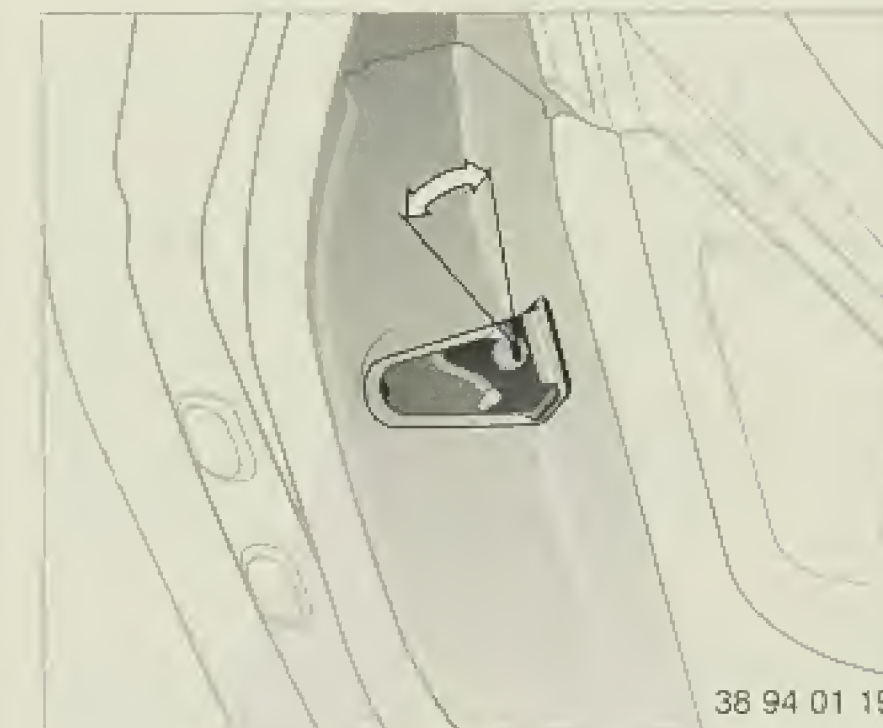
Note that children could lock the doors from the inside if they are alone in the car. Always take the key with you so that the car can be opened from the outside.



38 94 01 16

**Central locking system pushbutton**

This pushbutton also operates the central locking system when the driver's door is closed.

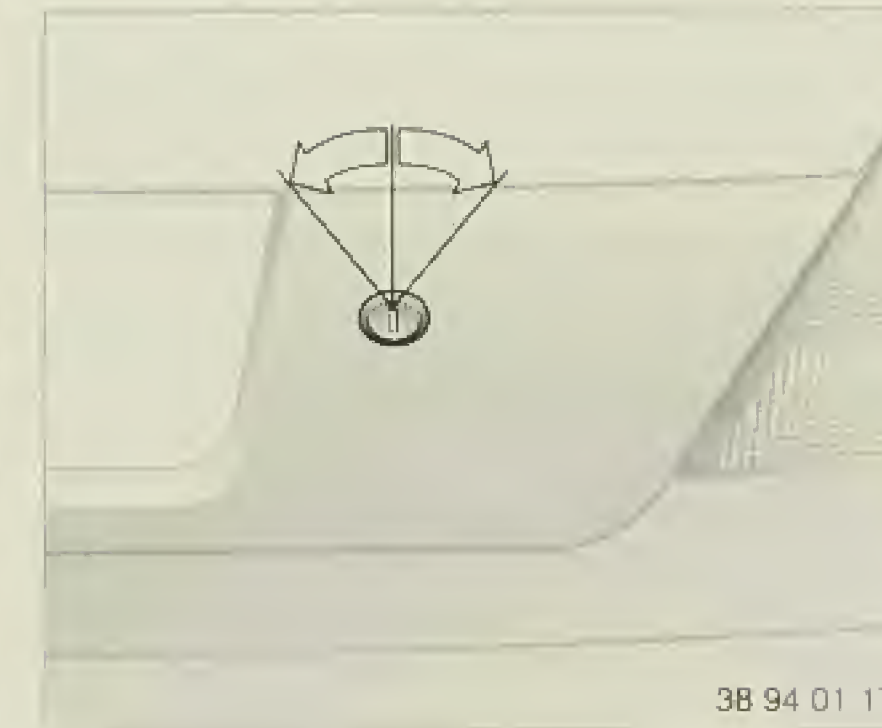


38 94 01 19

**Childproof door locks**

Insert the master key in the slot and turn outwards:

This door can now only be opened **from the outside**.



38 94 01 17

**Luggage compartment**

Locking/unlocking and functions are as for the door locks.

Only the master keys can be used to operate the luggage compartment lock; convenient operation of the windows and sliding/tilt roof is only by way of the door locks.

**Thiefproofing the luggage compartment**

Turn the master key clockwise and remove when in the horizontal position.

Nobody can gain access to the contents of the luggage compartment even if the door and ignition key B is handed over to another person. This is important for instance at a hotel.



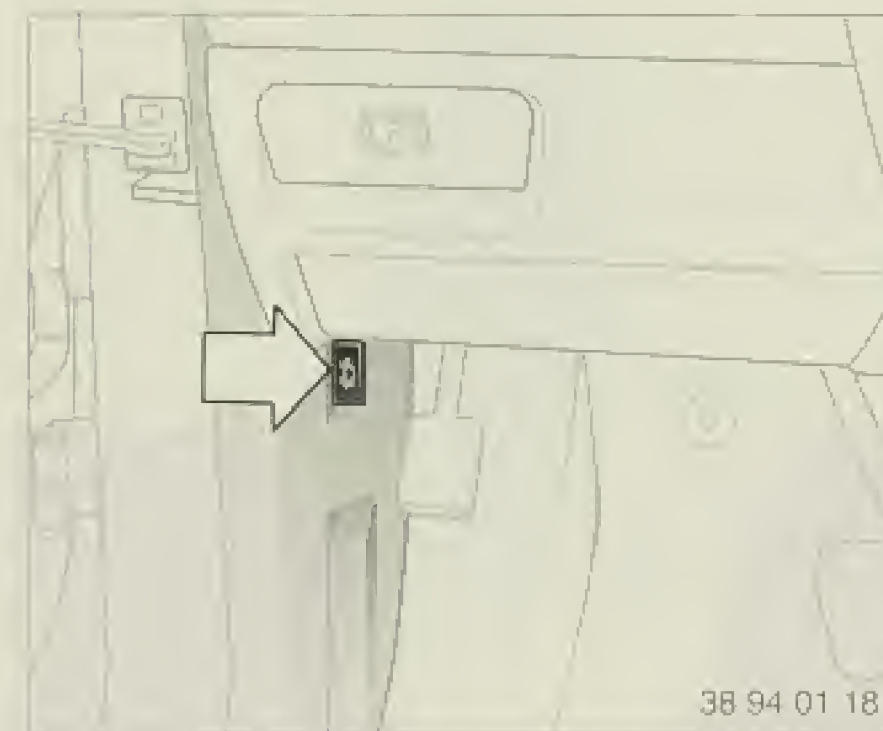


**Emergency operation**

(in the event of an electrical malfunction)

Insert the master key in the lock and turn anti-clockwise as far as the limit position; the luggage compartment will open automatically.

The luggage compartment is locked again as soon as the lid is closed.

**Pushbutton for opening the luggage compartment**

For opening the luggage compartment lid when the vehicle is at a standstill, provided it is not thiefproofed.

**Luggage compartment light**

This comes on when the lid is opened.

Use the **tensioning straps** on the luggage compartment base to secure smaller items of luggage. There is also a **small utensils net** on the rear wall of the luggage compartment.

There are **lashing points** at the corners of the luggage compartment for fitting luggage nets\* or retaining straps to secure items of luggage.

The **recessed handle** on the left next to the lock mechanism can be used to pull the luggage compartment lid shut more easily.

**Automatic "Soft-Close" system**

To close the luggage compartment lid, simply push it down lightly until the lid makes contact with the lock. After a brief delay, the system actuates the automatic closing process.

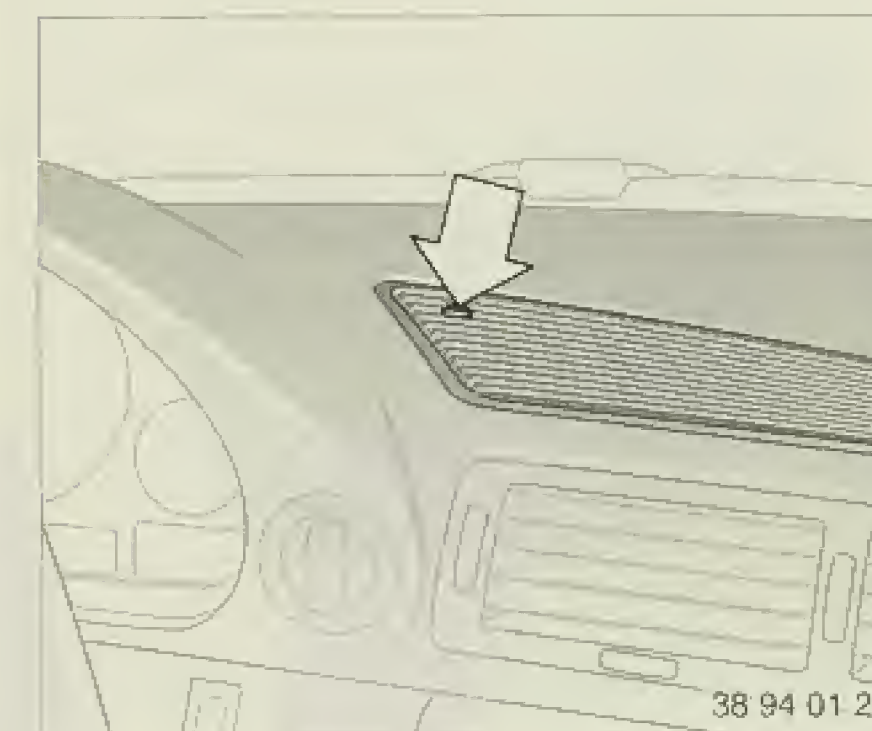
The opening process is also initially power-assisted.

This power-assisted function cuts out when the car is travelling faster than app. 3 km/h.

As always when using the power-assisted lid closing system, ensure that the luggage compartment edges are not obstructed by children's hands etc.

**Warning:** The luggage compartment lid should always be kept closed while the car is moving, to prevent exhaust fumes from entering the car.

If, in exceptional circumstances, it is necessary to travel with the luggage compartment lid open, close all windows and the sliding/tilt roof and select a high airflow setting at the rotary control or airflow volume selector wheels of the air conditioning system or automatic air conditioning.

**Anti-theft alarm system\***

The anti-theft alarm system reacts if:

- a door, the engine compartment or the luggage compartment is opened
- an attempt is made to start the engine
- the rear window or a side window is broken
- the car's attitude (tilt angle) is changed, for instance if it is towed away or jacked up in order to remove the wheels.

If the car is tampered with, the alarm sounds for 30 seconds and the ignition is put out of action. At the same time, the hazard warning flashers come on for 5 minutes, with the dipped headlights flashing in rhythm with the hazard warning flashers\*.

If two further attempts are made to interfere with the car (e.g. attempts to start the engine) the alarm sounds again for 30 seconds.

The system is **activated and de-activated** whenever the car is locked and unlocked at the locks or with the remote control.

**Warning:**

**On certain national versions, the anti-theft alarm system can only be operated via the remote control.**

**If the master key is used to unlock such models, the alarm will be triggered off.**

Activation is confirmed by the hazard warning flashers lighting up once only\*.

**LED displays**

When the system is correctly activated, the LED on the centre console flashes intermittently.

If the LED flashes when the system is being activated, this means that a door or the engine or luggage compartment is not properly closed or a side window is open by more than a very small amount (app. 10 mm). Even if this situation remains uncorrected, the remaining (closed) items will be protected after 10 seconds and the LED will flash intermittently.

When the system is de-activated, the LED goes out.

If an alarm signal is triggered off, the LED flashes again intermittently. During de-activation, the LED flashes for 10 seconds as a sign that an attempt was made to tamper with the car.





The **luggage compartment** is still accessible by pressing button 4 on the remote control, even when the alarm system has been activated. It is still protected by the alarm system once the lid has been closed again.

**Note:**

Incorrect installation of loudspeakers in the doors can interfere with correct operation of the window protection circuits.

To prevent **an unwanted alarm signal being set off by the tilt detector**, for example when the car is parked in elevating garages or carried on a train, this part of the system can be put out of action temporarily:

Immediately after activating the anti-theft alarm system, repeat the activating routine (in other words operate the remote control a second time).

The LED will come on for a short time, then flash again intermittently. The tilt alarm sensor is then out of action until the entire system has been de-activated.

**Note:**

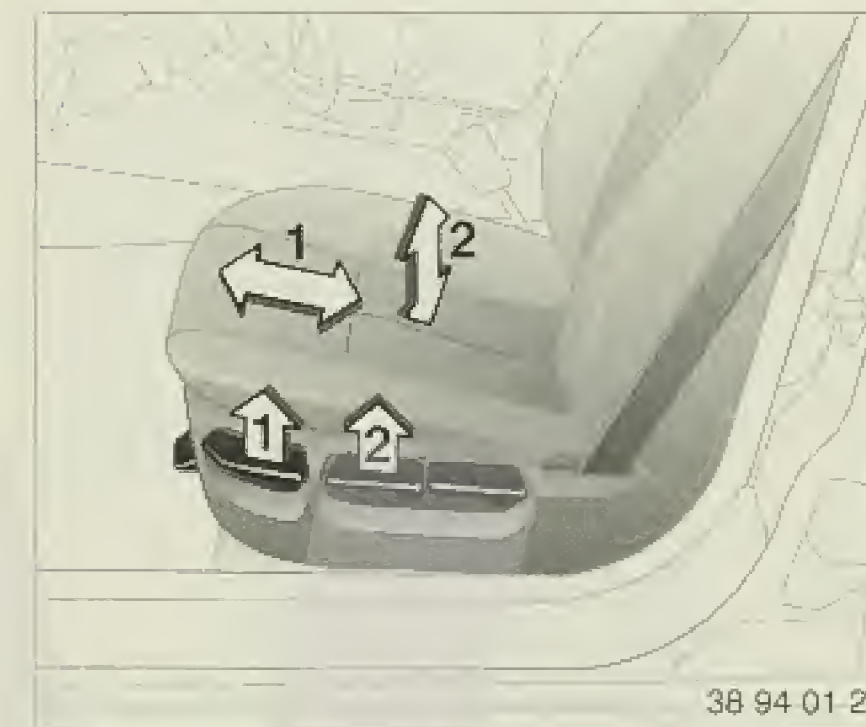
The convenient closure facility for windows and sliding/tilt roof, operated by means of the anti-theft alarm function, should if possible remain uninterrupted. If the procedure is interrupted and restarted within the first 10 seconds, this will shut down the tilt alarm sensor unintentionally.

In this case the system must be de-activated and re-activated before the tilt alarm sensor can function again.

If normal de-activation is not possible, adopt the following procedure:

- Unlock the door with a key (the alarm will sound for 30 seconds).
- Get into the car, close the door and turn the ignition key to position 1 while the alarm is still sounding.
- Wait until the LED goes out and the central locking is disengaged (after app. 15 minutes). During this time, do not open any door and leave the ignition key in position 1.

The system is then de-activated, and should be examined by a BMW service station.



## Seats

### Moving seat forward/back

Pull lever 1 and push the seat to the desired position.

After releasing the lever, make sure that the seat engages in its catches.

### Seat height adjustment

Pull lever 2 and apply weight to seat or allow it to come up as required.



### Seat back adjustment

Pull lever 1 and apply weight against the seat back or allow it to come forward.

**Seat angle adjustment** (driver's seat only)

Pull lever 2 and move the seat as required.

### Lumbar support\*

See BMW comfort seat overleaf.

**Note:**

The spine obtains most relief when you sit fully back in the seat and rest against the seat back.

The ideal position is when the head is a straight-line extension of the spinal column.

On longer journeys the seat back angle can be increased slightly to reduce further the strain on the body muscles.

However, the driver must still be able to reach the full circumference of the steering wheel with the arms slightly bent.

### Front and rear head restraints\*

To alter the height, pull up or push down as required.

Pivot forward or back to adjust the angle.

**Warning:**

**Head restraints** are intended to reduce whiplash injuries to the neck and upper spinal region. The centre of the head restraint should therefore be positioned approximately at ear level.

For the following reasons, it is essential for the seat belts not to be worn slack: in the event of a head-on collision, the lap belt could otherwise slide over the hips and injure the lower part of the body. Furthermore, excessive belt slack delays the restraining action.

**Do not reposition the driver's seat while the car is in motion. A sudden seat movement could cause you to lose control of the car and result in an accident.**

The front seats should not be reclined when the vehicle is parked on a slope (e.g. garage ramp, incline) as this could cause the automatic belt height adjustment device to become dislocated.

Nor should the front passenger's seat be fully reclined while the car is being driven.

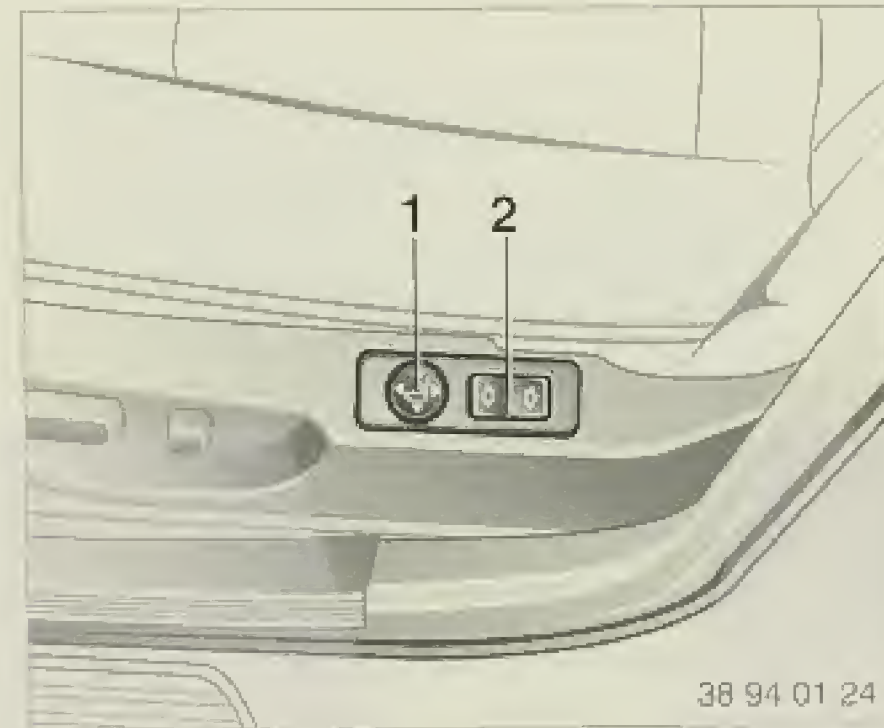




#### Electric front seat position adjustment\*

- 1 Seat angle adjustment
- 2 Forward-and-back adjustment
- 3 Seat height adjustment
- 4 Seat back angle adjustment
- 5 Head restraint height adjustment

The angle of the head restraints is adjusted manually.



#### BMW comfort seat\*

Additional adjustment functions for lumbar support (1) and shoulder support (2).

#### Lumbar support

The seat back contour can be altered to provide more support to the curved (lumbar) section of the spine.

The upper rim of the pelvis and the spinal column are supported, to encourage an upright but relaxed seated position.

Push the switch forwards or back to increase or reduce the curvature of the support.

Press the switch on the outer or inner edge to raise or lower the curved section of the support.



#### Shoulder support

Press the rocker switch to adjust the tilt angle of the seat back at the top.

The adjustable upper seat-back section can also be used to support the shoulders. This encourages a relaxed seating position and relieves the burden on the shoulder muscles.

To obtain the recommended optimum settings:

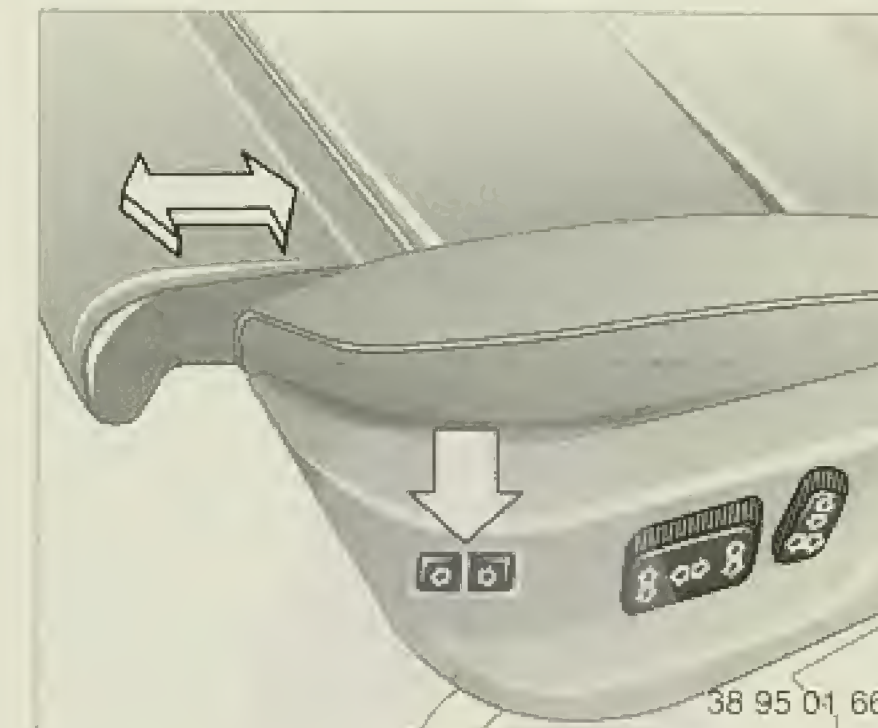
Driver and front passenger:

- Move upper seat-back section as far back as possible
- Adjust seat to optimum position as described on Page 31
- Move upper seat-back section forward until the shoulders are well supported.

#### Front passenger in rest position:

- Move upper seat-back section as far back as possible
- Increase seat's angle of inclination
- Move upper seat-back section further forward than usual.

Move the seat forward/to the rear to ensure that the seat belt lies closely against the wearer's body.



#### BMW contour seat\*

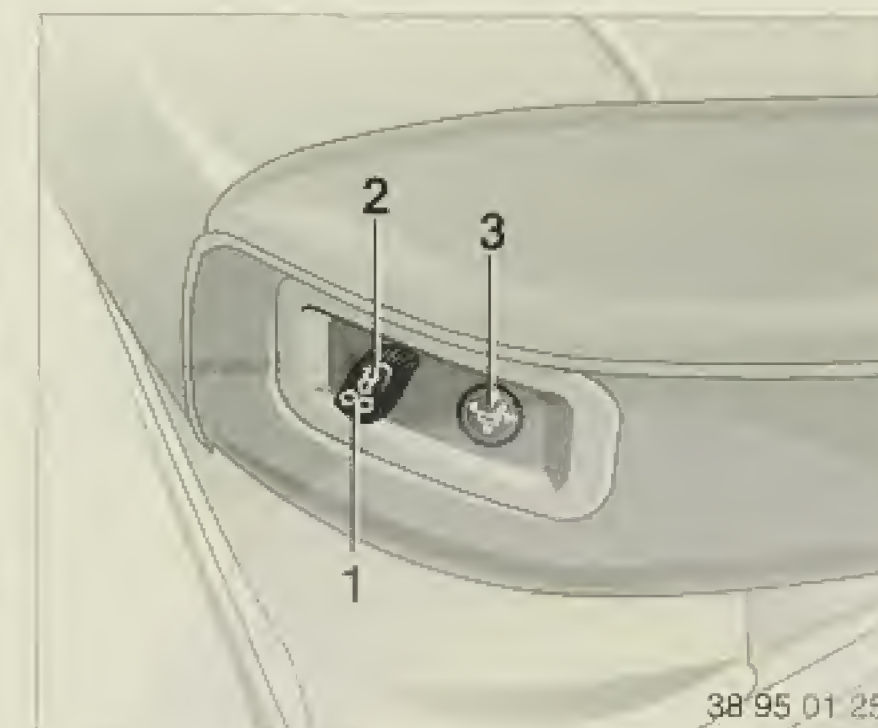
As the electrically adjusted seat, but also with adjustable thigh support and shoulder support.

#### Thigh support

To adjust, press rocker switch (arrow)

#### Shoulder support

See BMW comfort seat on previous page



#### Electric rear seat adjustment\*

- 1 Seat back adjustment
- 2 Head restraint height adjustment
- 3 Lumbar support adjustment

When a rear passenger fastens the seat belt, the corresponding head restraint is automatically extended.

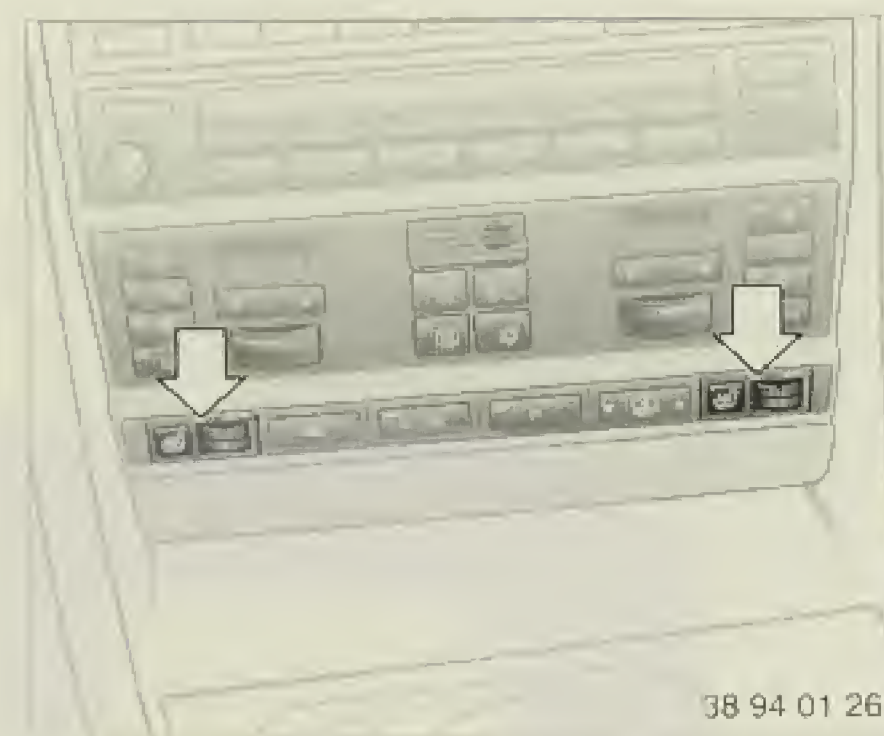
Its height can be adjusted at switch (2).

For lumbar support, see BMW comfort seat on previous page.

#### Electric rear head restraint adjustment\*

The switch for adjusting its height is located in the same place.





38 94 01 26

**Electric seat heating\***

The seat cushion and seat back can be heated when the ignition key is in position 2.

Adjust to the desired temperature at the knurled wheel; the seat heating is governed by a thermostat control.

- Minimum temperature
- Maximum temperature

Press the button to switch on and off.

When the seat heating is on, the green telltale lamp in the button is lit up.

**Rear-seat heating\***

The switches are located at the end of the centre console, under the ventilation grilles.

In view of its high power consumption, do not operate the seat heating for longer than is necessary. It cuts out automatically if the battery voltage is low.



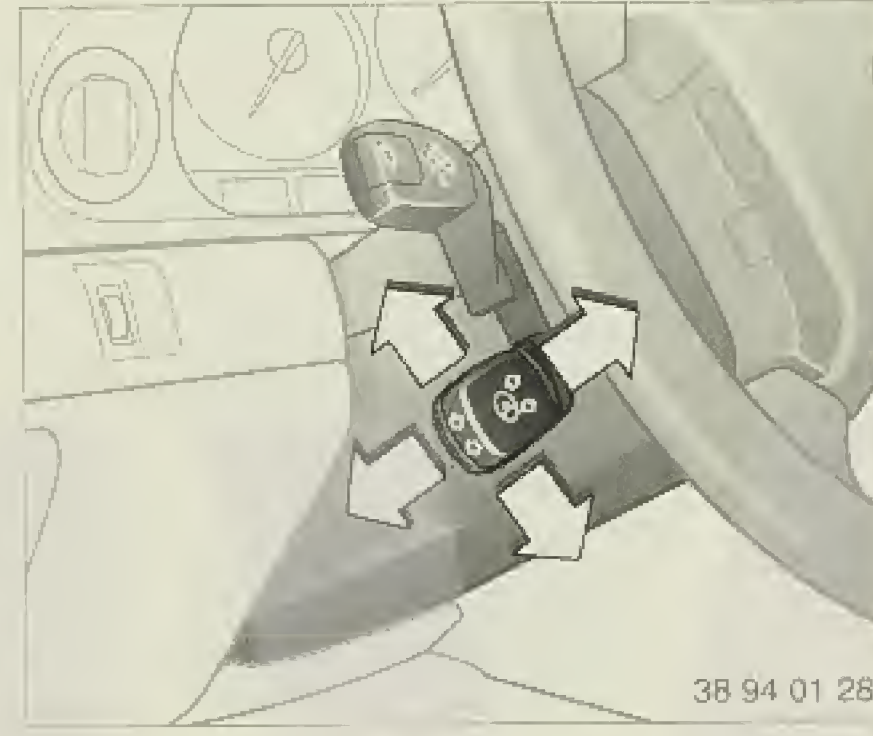
38 94 01 27

**Steering column adjustment**

- Fold out the adjusting lever.
- Push or pull the steering wheel until the desired reach position is obtained.
- Fold the lever back in to clamp the steering column in the new position.

**Warning:**

**Adjusting the position of the steering column while the car is being driven represents an accident risk.**



38 94 01 28

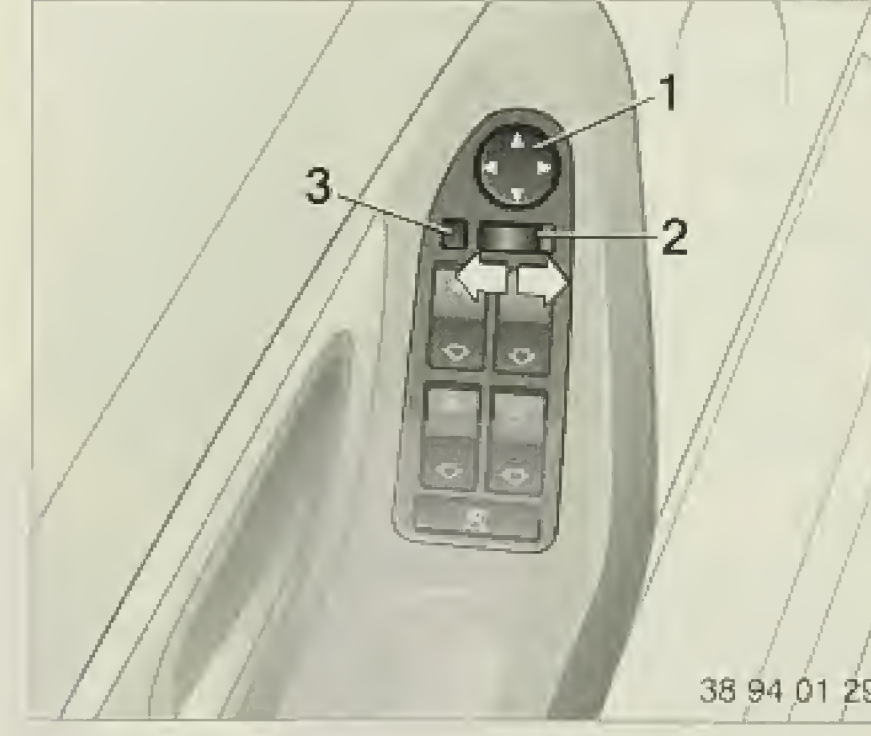
**Electric steering wheel adjustment**

The steering wheel can be adjusted in four directions, which are simulated by the adjusting lever movements.

**Warning:**

**Adjusting the position of the steering column while the car is being driven represents an accident risk.**

For memorizing of the steering wheel position, see "Seat, mirror and steering wheel position memory", Page 36.



38 94 01 29

**Mirrors****Electric door mirrors**

- 1 Mirror control switch for adjustment in four directions.
- 2 Changeover switch for the other mirror.
- 3 Switch to fold door mirrors in and out (only in conjunction with mirrors package\* – see next page).

Each time this switch is pressed, the mirrors are folded either in or out; this function is useful for example in car washes or narrow streets, or for moving mirrors back into position if they have been inadvertently knocked.

**Note:**

The mirrors can only be folded in when the car is stationary.

The mirrors can also be adjusted manually by pressing the edge of the glass.

For memorizing mirror positions, see "Seat, mirror and steering wheel position memory" on the next page.

**Aspherical wide-angle mirror\***

(not in conjunction with mirrors package) The outer section is of aspherical convex pattern, to provide a larger field of view than the normal inner section of the mirror.

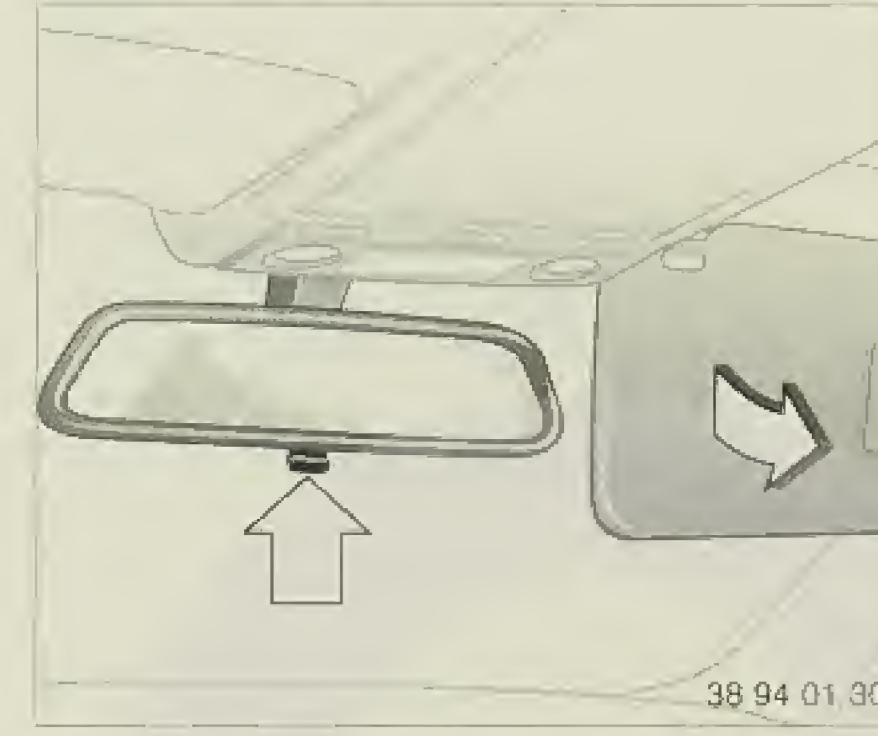
This extends the driver's rearward field of view and eliminates the "blind spot".

**Warning:**

**The passenger's side mirror is convex and therefore makes reflected objects seem closer than they really are. It can be difficult to estimate the precise distance at which another vehicle is following your car. The same applies to the convex section of partly-convex aspherical wide-angle mirrors.**

**Electric mirror heating**

Both outside mirrors are automatically heated in accordance with the ambient temperature in ignition key position 2.



38 94 01 30

**Inside mirror**

To reduce glare from the headlights of following vehicles after dark, move the small lever to tilt the mirror.

**Make-up mirrors**

Fold the sun visor down and slide the mirror cover sideways if appropriate.

The mirrors are illuminated from ignition key position 1 on.

**Sun visors**

The sun visors can also be pivoted to the side, against the door windows.







#### Automatic anti-glare inside mirror (electrochromic principle)\*

This mirror dims automatically and steplessly in accordance with the intensity of the light received (ambient light and the effect of glare from headlights).

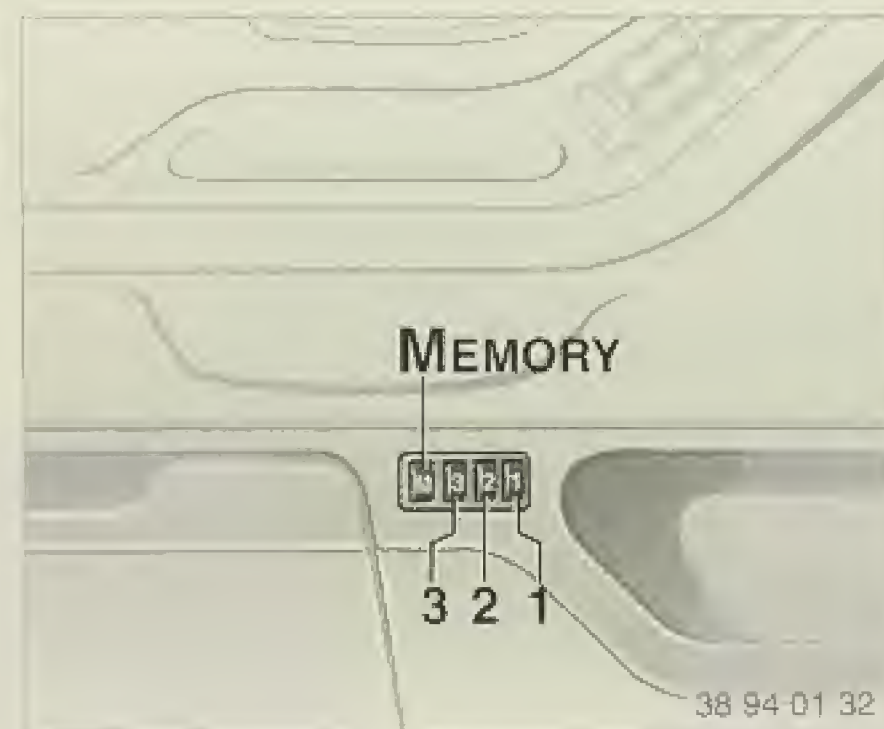
The mirror automatically switches to the standard, non-dimmed position when reverse gear or automatic transmission selector lever position R are selected.

#### Note:

The mirror will not operate reliably unless the photo-electric cells are kept clean and are not obstructed.

#### Mirrors package\*

Both door mirrors are likewise dimmed automatically and steplessly. They can also be folded in and out by pressing button 3.



#### Seat, mirror and steering wheel memory\*

Three different seat, outside mirror and (only with electric steering wheel adjustment) steering wheel positions can be memorized.

#### Memorizing:

- Ignition key must be in position 1 or 2.
- Select the desired seat, outside mirror or steering wheel position.
- Press the **MEMORY** button: the telltale lamp in the button comes on.
- Press button 1, 2 or 3 as required: the telltale lamp goes out.

#### Recall:

- With driver's door open or driver's door closed and ignition key in position 1:
- Briefly press desired button 1, 2 or 3.

The adjusting procedure is interrupted immediately if a seat adjustment switch or one of the memory buttons is pressed.

With the driver's door closed and ignition key either removed or positions 0 or 2:

- Press the desired button 1, 2 or 3 until the adjusting procedure has been completed.

#### Note:

If the Memory key has been pressed inadvertently, press it again; the telltale lamp will go out.

#### Passenger's side mirror tilt-down (parking) position

Move the mirror changeover switch to the "Driver's side" position (see previous page).

When reverse gear (or automatic transmission selector lever position R) is selected, the mirror on the passenger's side will tilt down slightly to display the ground along the side of the car (for instance the edge of the kerb).

This automatic function can be switched off if not required: move the mirror changeover switch to the "Front passenger's side" position.



#### Seat belts

**Wear the seat belts whenever the car is driven.**

#### Fastening the belt:

The seat belt catch must be heard to snap closed.

#### Releasing the belt:

Press the red release button on the belt catch and guide the belt back if necessary to reinforce the action of the automatic reel.

#### For your own safety, please note:

The belts should not be twisted and must run firmly across the pelvis and shoulder. They should not pass over hard or fragile objects in your pockets.

The seat belt must not pass across the neck, become trapped at any point or chafe against any sharp edges.

The belt should be as close to the body as possible, therefore avoid wearing thick and heavy clothing.

Take up slack regularly by pulling up the belt at the shoulder.

The upper belt anchorage point is automatically adapted to occupants of various builds as the seat is adjusted in the forward/rear direction.

#### Warning:

**For the following reasons, it is essential for the seat belts not to be worn slack: in the event of a head-on collision, the lap belt could otherwise slide over the hips and injure the lower part of the body. Furthermore, excessive belt slack delays the restraining action.**

**Pregnant women are also advised to wear the seat belt at all times, making sure that the lap belt is low down over the hips and does not press against the abdomen.**

**Never restrain more than one person with each seat belt.**

**Babies or small children must not travel on the lap of another occupant of the car.**

#### Child restraint systems\*

**Children up to the age of 12 who are smaller than 150 cm must be protected by a suitable, approved child restraint system.**

Babies up to 9 months old can travel in a special shell-type baby carrier facing rearwards, and secured to the front passenger seat or the rear seat by the standard seat belt.

The BMW Vario System\* is available for small children in the age-groups between 9 months and 3 years and between 3 and 6 years.

The BMW Vario System is used facing forwards on the rear seat, and is secured by the standard seat belt. An additional restraining element is required for children up to 3 years.

A further three-element child's seat, comprising seat shell, seat back and restraining section, is generally available for the age-group from 2 to 12. This too is installed facing forwards on the rear seat, and secured by the standard seat belt.

Whenever a child restraint system is used, its manufacturer's instructions must be complied with. The necessary rear-seat anchorage points are provided as a standard feature.





**Warning:**

**Child restraint systems must not be attached to the front passenger seat.**

In no circumstances are seat-belt or child restraint systems to be modified.

If any damage or excessive loads are incurred in an accident, a BMW service station must renew the belt system including **belt catch tensioner** and/or **BMW child restraint systems\*** and check the belt anchorages.

If the belt-catch tensioner is triggered off, the airbag telltale light will come on.

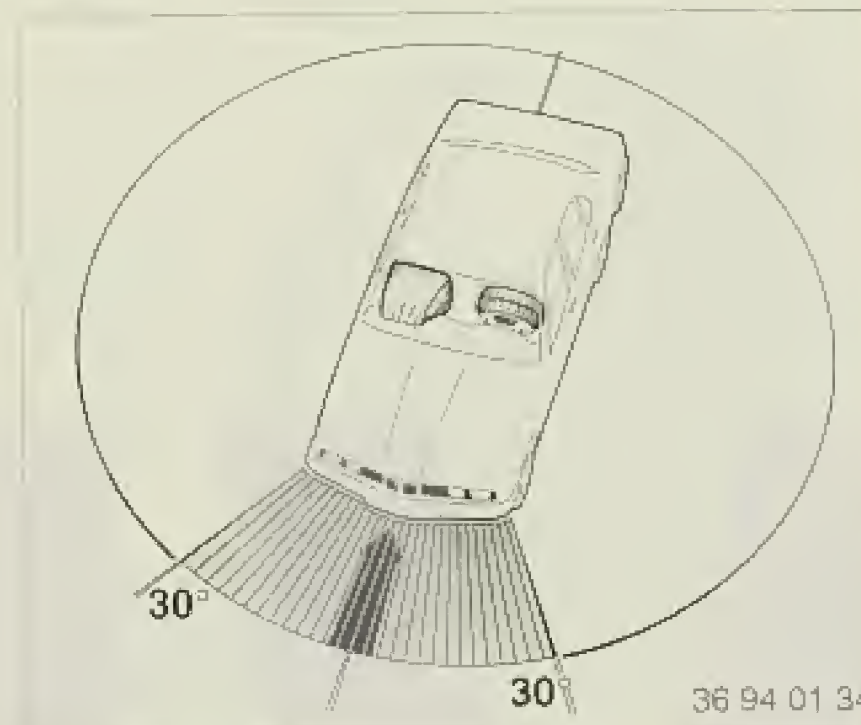
**The seat belt reel will lock:**

- if pulled out rapidly
- during sudden braking or accelerating
- when the car is cornered sharply
- when the car is tilted at a considerable angle.

**Note:**

Drivers should ensure that their passengers also comply with the relevant requirements and instructions concerning seat belts.

For **care of belts**, see Page 131.

**Airbag restraint systems**

- Driver's airbag
- Front passenger's airbag

The airbag restraint systems protect the driver/front passenger in a severe head-on collision. The inflated airbag restrains forward movement of the seat occupant and protects his or her head and upper body against injury.

The picture shows the area within which the airbag restraint system is triggered off.

In less severe accidents and if the car rolls over, is sideswiped or struck from the rear, protection is provided by the seat belt alone.

**Warning:**

The airbag is an additional safety device. It must not be regarded as an alternative to wearing the seat belt.

**Telltale light in instrument cluster:**

This telltale confirms that the system is in working order when the ignition key is turned to position 1 or beyond.

**System operational:**

- The telltale comes on briefly seconds and then goes out.

**System defective:**

- The telltale does not come on.
- The telltale comes on briefly, goes out briefly and then comes on again.

In such cases there is a risk that the system will not be triggered off even if a sufficiently severe accident occurs within the airbag range.

Please have it checked by a BMW service station without delay.

**Note:**

The airbag telltale light also comes on if the belt catch tensioner is triggered off.

**What happens when the system is triggered off?**

The airbags, which are concealed under the flaps in the steering wheel or in the fascia, are inflated rapidly and burst out of the preformed aperture in the padded covers.

The entire process takes place with great force, within only a twentieth of a second. In view of the very brief system response time, the noise of propellant ignition, inflation and subsequent deflation is lost in the general accident situation.

Propellant gas and small quantities of gaseous fumes are released when the airbag is triggered off. They do not represent a health hazard or imply that the car has caught fire.

The sudden increase in pressure inside the car when airbags are inflated may temporarily impair the occupants' hearing.

**Warning:**

**Your seated position should be as far as convenient from the steering wheel or fascia.**

**Always hold the steering wheel by its rim.** Failure to drive in this manner could result in hand or arm injuries if the airbag operates.

**No objects should be held or allowed to rest between the airbag and the seat occupant's body.** The cover of the front-passenger airbag should not be used as a storage tray.

Even if all the appropriate precautions are taken, the risk of facial injuries when airbags are triggered off cannot be entirely ruled out in all accident situations.

**Airbag safety instructions**

The airbag restraint system's gas generator must not be removed from the car. Any testing and assembly work on it may only be carried out by specially trained personnel. If the airbag restraint system develops a fault, is inactivated or is triggered off as intended in an accident, the necessary repair or dismantling work must be entrusted to a BMW service station.

**No modifications to individual components or to the wiring should be attempted.** This includes the padded cover in the centre of the steering wheel and the cover on the instrument panel, which must never be covered with adhesive or any other material or otherwise modified or reworked in any way. The steering wheel itself must not be taken off.

In order to comply with the relevant safety regulations, the airbag generator may only be scrapped by a BMW service station.

**Any careless or unskilled interference with the system could lead to its failure or to accidental triggering off with the risk of injury.**






Child restraint systems mounted on the front passenger's seat are not permitted on cars with a front-passenger airbag. In certain countries it is in any case required by law that children under the age of 12 should only travel on the rear seats.


**Note:**

Drivers of cars fitted with airbags should ensure that their passengers also comply with the relevant requirements and instructions.



### Main light switch

 **Side lights**

 **Dipped headlights/  
xenon lights\***

If the ignition is switched off while the dipped headlights are in use, only the side lights remain on.

After the ignition key has been turned to 0, after the driver's door has been opened a message appears in the Check Control if the lights have not been switched off.

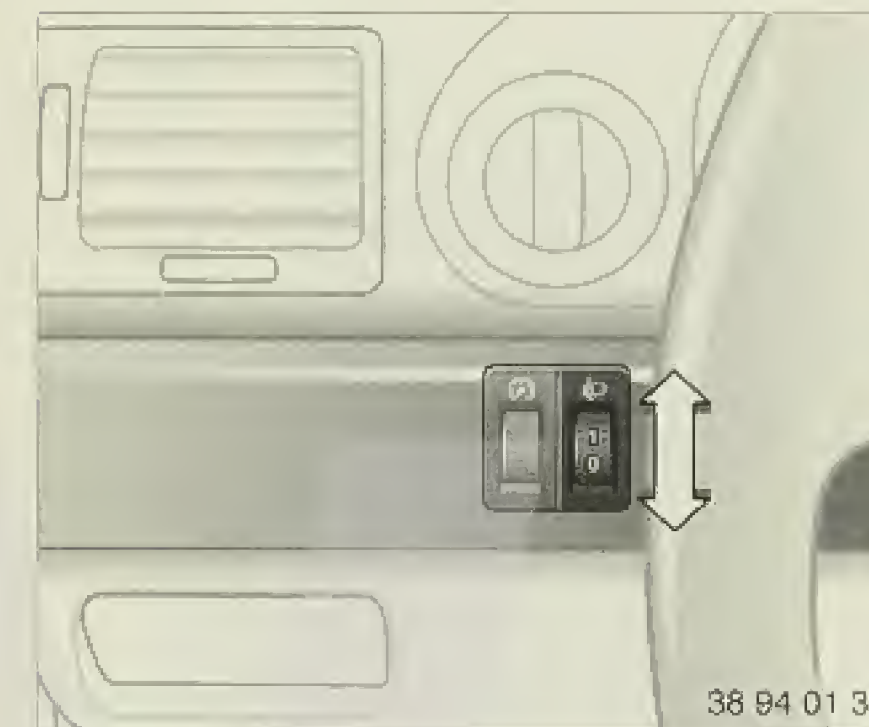
### Xenon lights

For further details, please see Page 109.

### Daytime lights setting\*

If desired, the light switch can remain in the second position: when the ignition is turned off, the car's lights go out.

Depending on your car's specification, the daytime lights may come on automatically in ignition key position 2, even if the light switch is at 0.



### Beam throw adjustment\*

The low (dipped) headlight beams can be adjusted to allow for changes in the load on the car.

0 (1) = 1–2 persons, no luggage  
1 (1) = 5 persons, without luggage  
1 (2) = 5 persons, with luggage  
2 (2) = 1 person, luggage compartment full

Figures in brackets: when towing a trailer.

Vehicles with self-levelling suspension:

All load conditions: position 0

Exception: 1 person, luggage compartment full and with a trailer being towed: position 1.

Note the permitted rear-axle load limit.

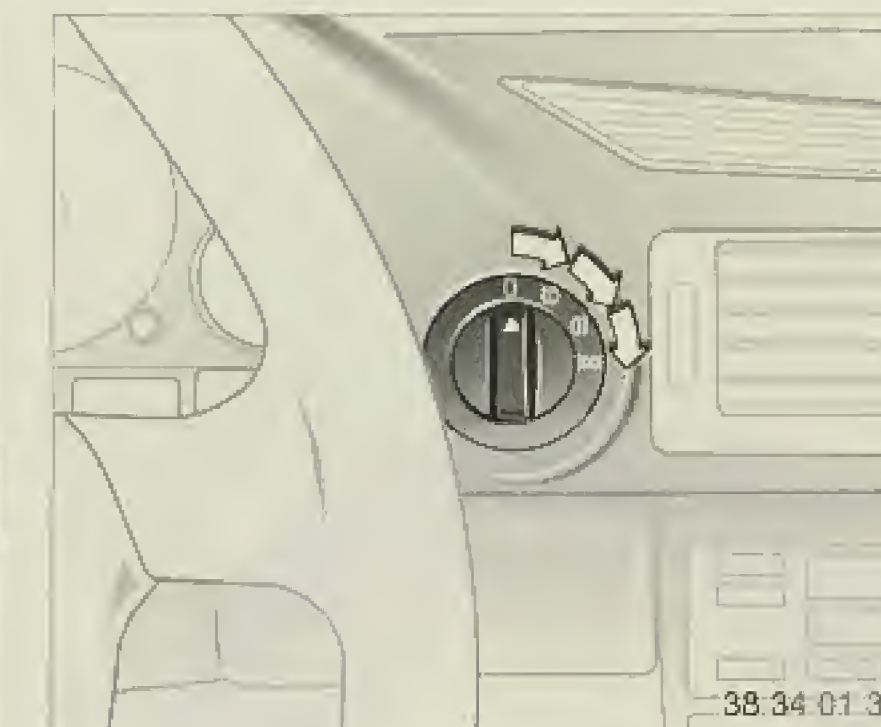
If the dipped headlight beams are very low, this indicates a fault in the beam throw adjustment system.

Cars with xenon lights have automatic headlight beam throw adjustment.



### Instrument lighting


The intensity can be varied at the knurled wheel.




### Fog light switches

 **Front fog lights**

The green telltale light in the instrument cluster comes on when the fog lights are in use.

 **Rear fog lights**

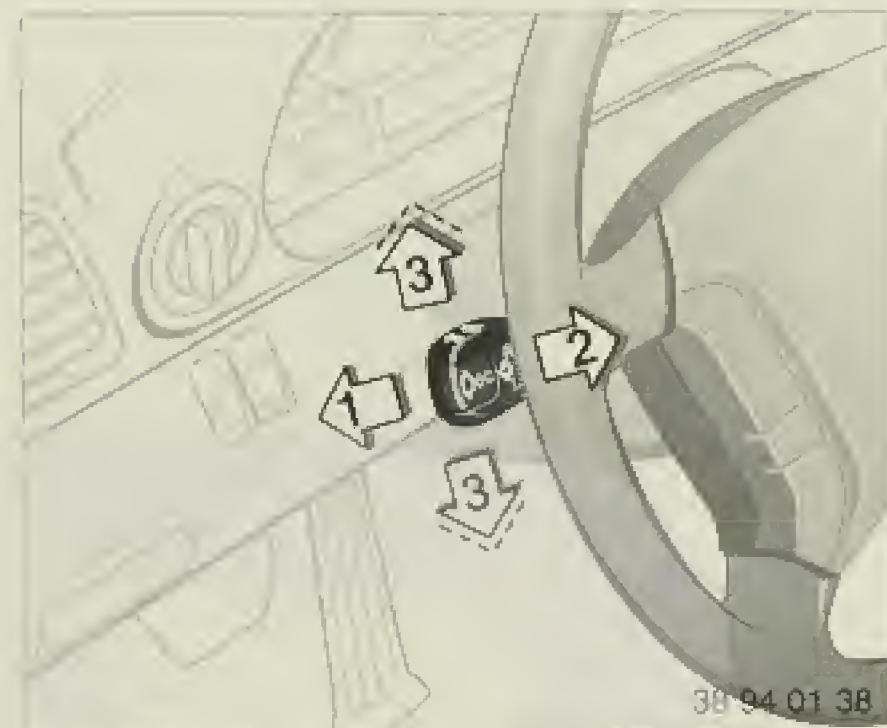
The yellow telltale light in the instrument cluster comes on when the rear fog lights are in use.

 **Front and rear fog lights**

Please comply with local legislation concerning the use of front and rear fog lights.







### Lever for flashing turn indicators/dipped headlights

- 1 High headlight beams (blue telltale light)
- 2 Headlight flasher
- 3 Turn indicator repeater (green telltale light, flasher relay ticks rhythmically).

If the repeater flashes and the relay ticks more rapidly than usual, a turn indicator bulb has blown (if a trailer is being towed, a bulb may also have failed on the trailer).

### To indicate a turn briefly

When starting from a standstill or changing lanes, a signal can be given by moving the lever without allowing it to engage in the turn signal position. When it is released, it returns automatically to the central (Off) position.

### Right or left parking lights

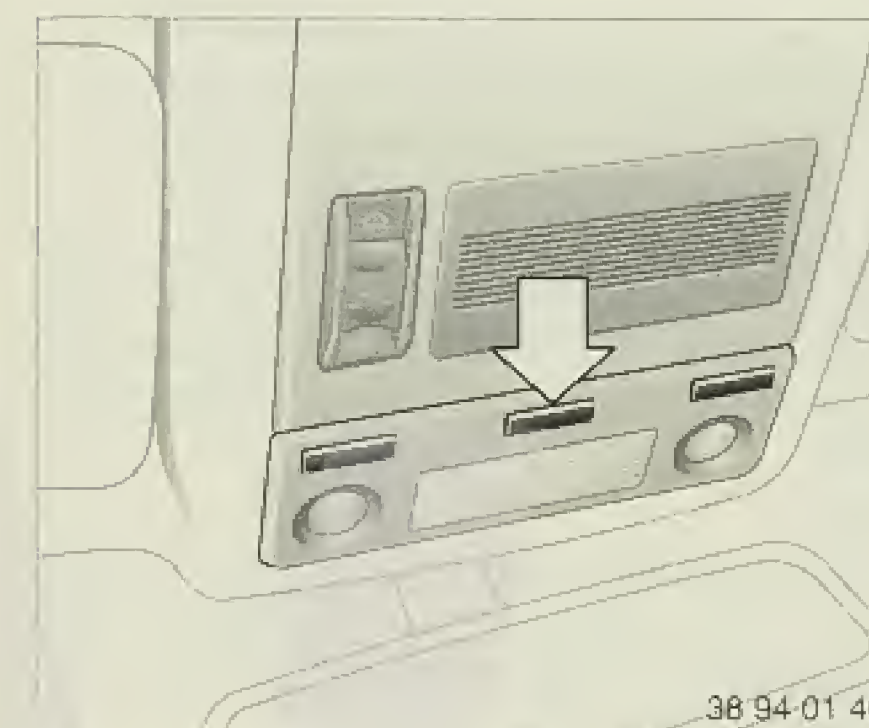
In ignition key position 0, press the lever in the desired direction from its home position until it reaches a detent.



### Hazard warning flashers

The pushbutton lights up in a regular rhythm when the hazard warning flashers are operating.

The pushbutton is illuminated when the car's outside lights are on.



### Inside light/footwell lights

The lights come on:

- For a few seconds after the doors have been unlocked with the radio remote control.
- When a door is opened (courtesy switches at doors).
- For a few seconds after the doors have been closed and the ignition is switched off, or until the ignition is switched on.
- For a few seconds after the ignition has been switched off if the vehicle lights are on.
- After an accident.

### Button for inside light (arrow)

The inside light is switched on or off by pressing this button.

To switch off the light permanently, hold the button depressed for about 3 seconds.

Touch it briefly to revert to normal operation.

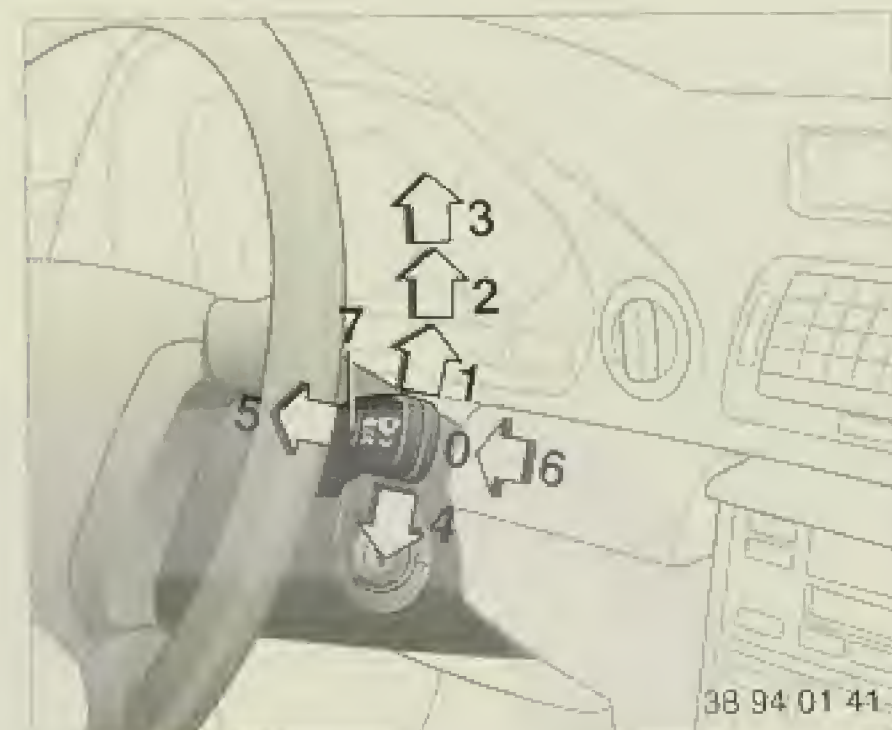
The **red warning lights** in the doors alert other road users to the fact that a door is open (i.e. protruding). They remain off if the inside light is switched off permanently.

The **front reading lights** next to the inside light and in the **rear compartment** can be switched on and off at the separate switches if the ignition key is in position 1 or beyond.

To protect the battery, any lights still burning inside the car are extinguished about 15 minutes after the ignition key has been turned to 0.







### Wipe/wash equipment

0 Parked position of wipers

1 Intermittent wipe

2 Normal wiper speed

3 Fast wiper speed

4 Flick wipe

5 Automatic windscreen wash

6 Automatic intensive cleaning\*

7 Knurled wheel for adjusting wiper interval

### 0 Parked wiper position

The wipers are partly concealed behind the rear edge of the engine compartment lid. In order to swing the wipers up vertically, for instance to renew the blades or at sub-zero temperatures, lever position 1 should be selected and the ignition switched off as soon as the wipers reach the new position.

#### Important:

**Fold the wipers back on to the windscreen before turning ignition to positions 1 or 2.**

### 1 Intermittent wipe

The length of the interval can be adjusted to four different settings at knurled wheel 7.

The selected interval is also modified automatically according to the car's actual road speed.

### 2 Normal wiper speed

If the car comes to a standstill, the wipers automatically switch to intermittent operation.

### 3 Fast wiper speed

If the car comes to a standstill, the wipers switch to normal speed.

### 5 Automatic windscreen wash

Fluid from the washer tank is sprayed on to the windscreen and the wipers operated briefly.

(Exception: when the lever is pulled **briefly**, washer fluid is sprayed on to the windscreen without the wipers being operated.)

### 6 Automatic intensive cleaning\*

Same as 5, but intensive cleaning fluid is first sprayed on to the windscreen.

### Headlight cleaning system\*

If the headlights are switched on, they are automatically cleaned as well on each fifth occasion the windscreen wiper or intensive cleaning system operates.

#### Note:

Do not use the washer systems if there is any risk of the liquid freezing on the windscreen. This could interfere with the driver's view of the road.

Do not run the washer system if the fluid reservoir is empty, or else the washer pump will be damaged.

### Heated windscreen washer jets and wiper rest area on windscreen

Heating takes place automatically in ignition key position 2.



38 94 01 43

### Parking brake

When the pedal is depressed, the "P" telltale light in the instrument cluster comes on in ignition key position 2.

#### Important:

**The brake lights do not come on when the parking brake is applied.**



38 94 01 42

To release the brake, pull the handle. Please note that the brake is then released immediately.

The main purpose of the parking brake is to prevent the vehicle from rolling away when stationary; it acts on the rear wheels.

#### Important:

**If in exceptional circumstances it is necessary to apply the parking brake while on the move, depress the pedal with care, always remembering to keep the release handle pulled the whole time.**

**If the pedal is depressed too strongly, the rear wheels may become over-braked, causing the car's tail end to run wide, with a risk of losing control.**







36 94 01 44

BMW 730iL

### Manual gearbox

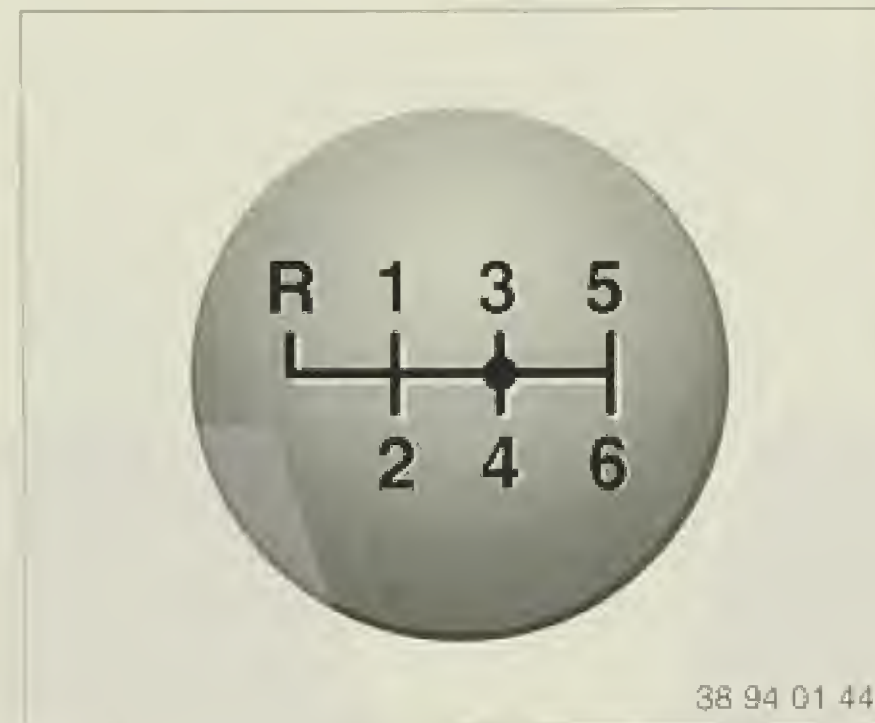
The normal rest position for the gear lever (marked by a dot) is in the 3rd/4th gear plane of the gate.

When neutral is selected from any gear, the lever moves back to this position.

There is synchromesh on all gears.

#### Important – BMW 730i/iL:

At an engine speed higher than 5000/min in 5th gear, never shift down to 4th, or the engine will overspeed and could be damaged.



38 94 01 44

BMW 740i

#### Important – BMW 740i:

When selecting 5th or 6th gear, the lever must be pressed firmly to the right, to ensure that 3rd or 4th gear is not selected accidentally.

#### Reverse

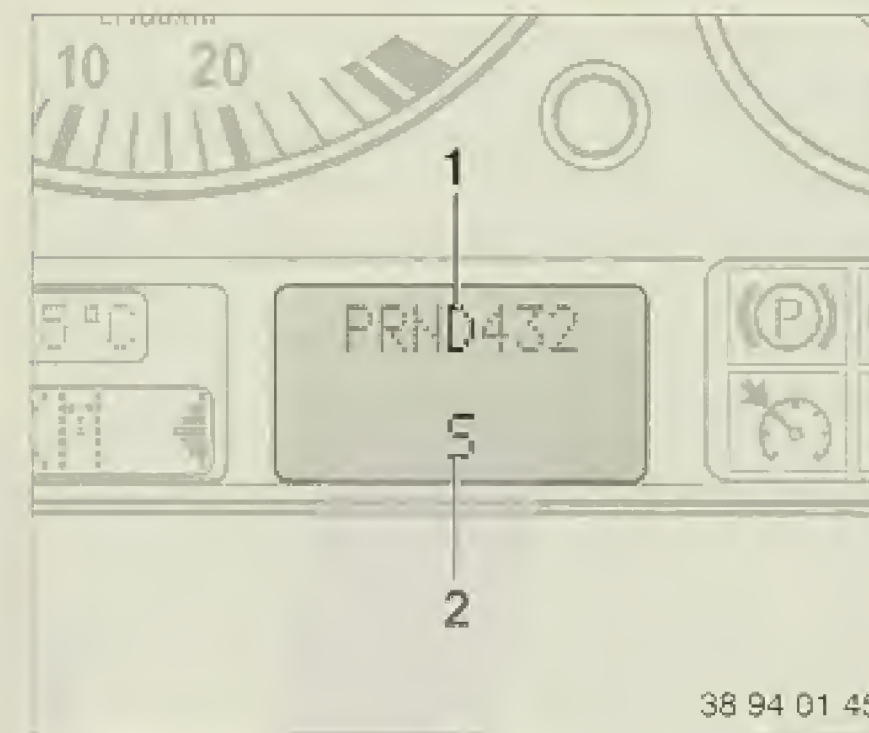
Engage this gear only when the car is standing still. Press the gear lever to the left until slight resistance is overcome.

#### Reversing lights

These come on in ignition key position 2, when reverse gear is selected.

#### Warning:

Never hold the car on an uphill gradient by slipping the clutch. Always apply the parking brake. A clutch that is allowed to slip will wear rapidly.



38 94 01 45

### Automatic transmission\*

Selector lever positions (1):

P R N D 4 3 2

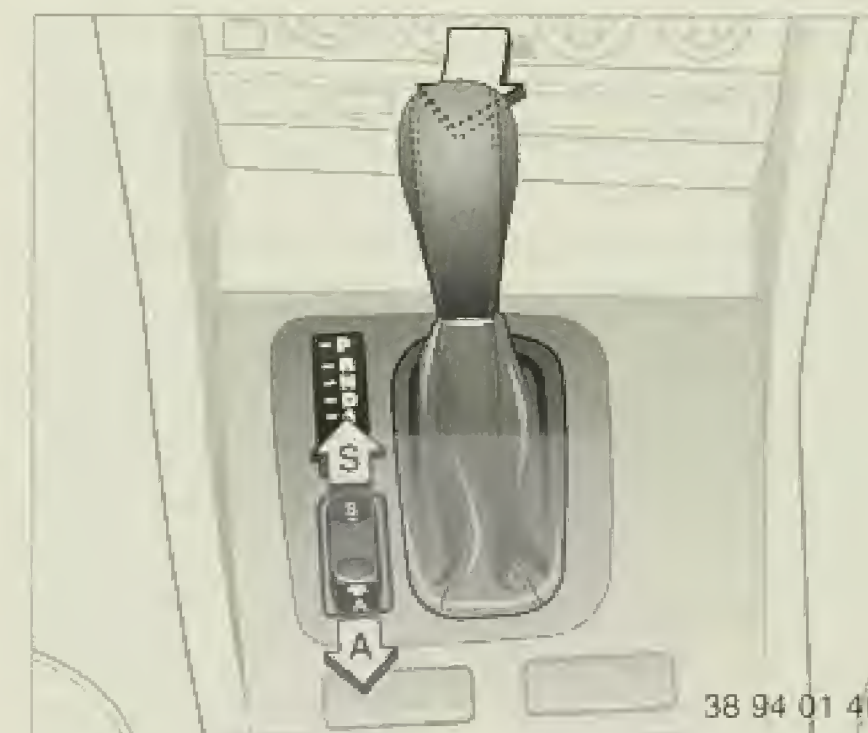
There are also two driving programs (2), which are selected at a separate program switch:

A – Adaptive program

S – Sport program

Slide the switch in the desired direction. Only the S program is displayed in the instrument cluster.

For details of the programs, see overleaf.



38 94 01 46

There is a locking catch (arrow) on the front of the selector lever handle, which prevents the lever from being moved accidentally to various positions. Press it in to release.

#### Note:

The engine can only be started in the P or N position.

If the engine is running, even if you do not touch the accelerator, the car will move when a gear is selected.

After moving the lever, wait for the selected gear to engage before depressing the accelerator.

Do not leave the car with the engine running unless you have moved the selector to P or N and applied the parking brake.

#### Important:

If you select N accidentally at a fairly high engine speed, release the accelerator immediately. Wait for the engine speed to drop before selecting the desired gear.

#### P – Park

Select only when the car is standing still. The driven wheels are locked.

#### R – Reverse

Select only when the car is standing still.

#### N – Neutral (idling)

Select only if the journey is interrupted for a fairly long time. When the car is being driven at speed, only select neutral if a skid occurs.

#### D – Drive (forward travel with automatic transmission)

Use this position for all normal driving. All forward gears are used.

#### 4 – Direct

The transmission shifts up as far as 4th gear.

**3 and 2<sup>1)</sup>** – for hill-climbing and braking. Select these positions to restrict the choice of gears on mountain roads and lengthy uphill or downhill gradients. They make full use of both engine power and the engine braking effect, and avoid undesirable upshifts.

<sup>1)</sup> 1st gear is automatically selected. In view of its special control settings, this position is particularly suitable for trailer towing.



The lever can be moved to these positions at any speed, but to avoid overspeeding the transmission will not shift down in each case until a sufficiently low speed has been reached.

#### **“Kick-down”**

To obtain maximum acceleration, the accelerator pedal can be depressed beyond the normal full-throttle position, at which a pressure point must be overcome.

The kick-down function makes maximum use of the car's available power by shifting to a lower speed as early as possible, and by shifting up at higher than usual engine speeds.

#### **Transmission shift programs**

Your BMW's automatic transmission has Adaptive Transmission Control (AGS) as standard.

The special features of this control system are described below.

As a general principle, it can be stated that in program A and selector lever position D, the AGS adapts ideally to each driver's style and the given road conditions.

The remaining selector lever forward positions are consequently only used in extreme situations, e.g. when towing a trailer in circumstances such as very steep inclines and downhill stretches, as indicated by the footnote on the previous page.

#### **A – Adaptive program**

This program is automatically selected whenever the engine is started. In all forward-travel positions, Adaptive Transmission Control automatically chooses the most suitable shift program from the various alternatives provided. It adapts continuously to the manner in which the car is being driven (e.g. calm and relaxed or harder and more dynamically), to road influences (smooth surfaces, severe uphill gradients etc.) and to actual driving circumstances (e.g. twisty roads, descending steep gradients).

#### **S – Sport program**

In this setting only the most dynamic of the available shift programs is used. Selection of this program is recommended as a means of making maximum use of the car's performance, regardless of the driving style at any given moment.

#### **Selector lever positions**

Positions 4, 3 and 2 have the effect of limiting further upward shifts if this is desired by the driver.

The AGS also functions in these selector lever positions, with certain limitations on the available gears, depending on the position selected.

#### **Special functions**

In Program A, Adaptive Transmission Control influences the choice of gear (speed range) in the automatic transmission by means of various special functions.

This has the effect of suppressing certain shifts that would normally have occurred, and may cause others to take place in special circumstances although the driver would not have expected them.

#### **Suppressing upward shifts**

If the accelerator pedal is released suddenly, when cornering hard or on steep downhill gradients, upward shifts are normally prevented. This ensures that the engine's braking effect is utilized and eliminates many unnecessary shifts when the car is driven in a markedly enthusiastic manner.

#### **Performing downward shifts**

Operating the “kick-down” function described on the previous page is often not necessary, as in many cases depressing the accelerator pedal sharply will initiate a downshift.

If the car accelerates on a downhill gradient even though the accelerator pedal is in the idling position, upshifts are suppressed.

If the brakes are now applied, the transmission shifts down by one gear provided that a given upper engine-speed limit is not exceeded. This increases the engine braking effect.

#### **Control of winter program**

When driving on slippery surfaces (snow and ice), a winter shift program is selected automatically. The car moves away from a standstill in 2nd gear and shifts up to higher gears as early as practicable. This makes progress over slippery surfaces easier and enhances the car's traction and dynamic stability. AGS switches out of the winter program as soon as a higher-grip road surface is identified, the sport program selected or the ASC+T or DSC switched off.

#### **“TRANS FAILSAFE PROG” in Check Control display:**

An electronic control unit or an automatic transmission malfunction is indicated.

All selector lever positions are available, but in the forward travel positions the car remains in 4th or 5th gear.

In this situation, avoid severe loads and take the car to the nearest BMW service station without delay.

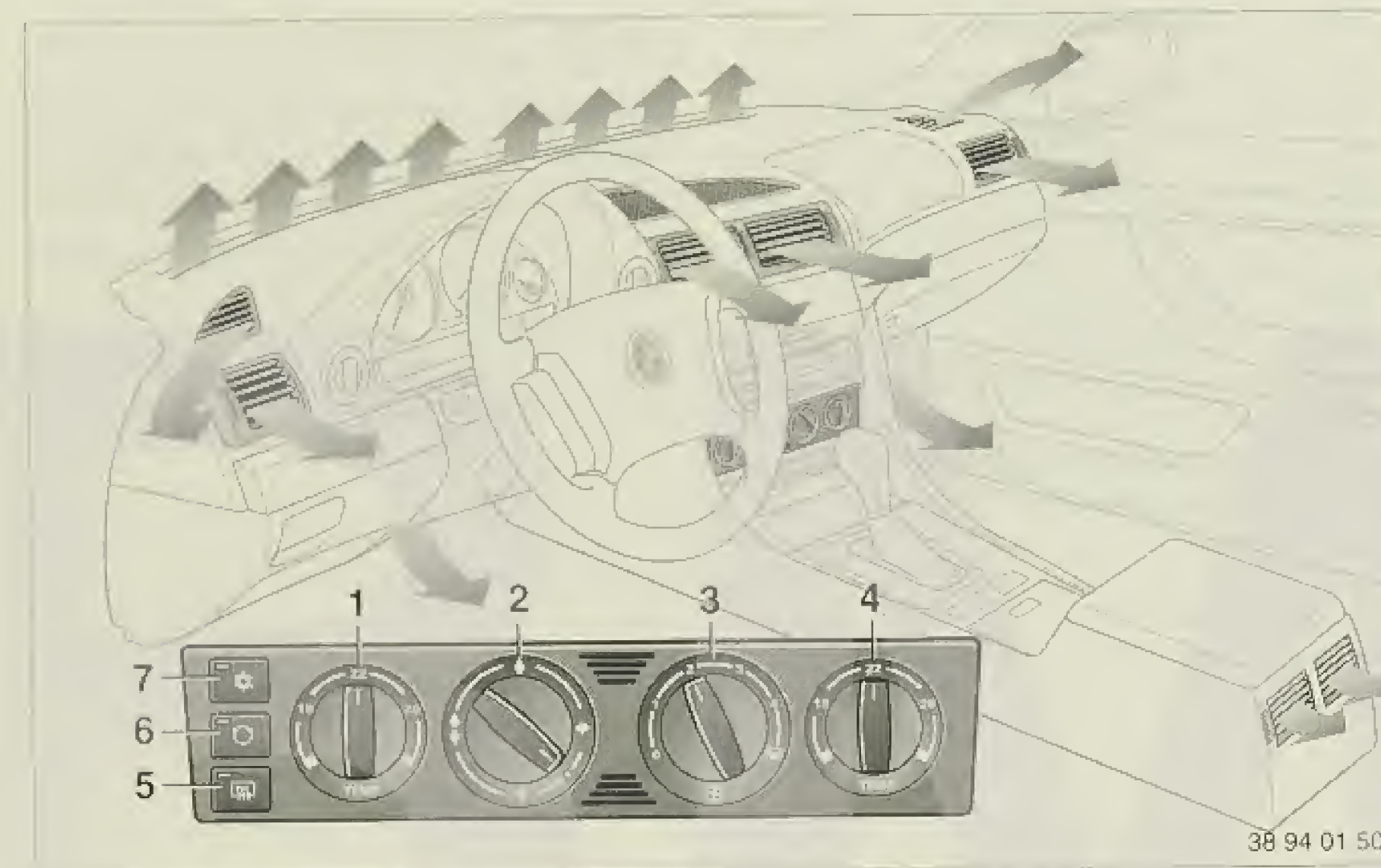


#### **Warning:**

**Never work inside the engine compartment if a gear has been selected at the automatic transmission. Never leave children unattended in the car.**

For tow-starting, towing away and starting with a flat battery, see Pages 101 and 102.





### Heating and ventilation/ air conditioning

- 1 Rotary temperature control for left side of car
- 2 Rotary air distribution control
- 3 Rotary airflow volume control

- 4 Rotary temperature control for right side of car
- 5 Pushbutton for heated rear window, see Page 72
- 6 Pushbutton for recirculated air control
- 7 Pushbutton for air conditioning system



### Rotary temperature controls for left and right sides of car

The scales are merely intended as a guide to the interior temperature. The standard setting is 22 °C, including with the air conditioning system on. The selected temperature is maintained by the control circuit. Alter the settings by only small amounts at a time, to avoid undesirable temperature fluctuations.

After the engine has been started, the control circuit ensures that the selected interior temperature is reached as rapidly as possible, regardless of the ambient temperature conditions. The temperature of the air emerging from the grilles is gradually adjusted to the selected value.

At both limit settings of the driver's rotary switch, automatic temperature control for both sides of the car is switched off.

Minimum temperature setting: heating switched off on both sides, maximum cooling output when air conditioning switched on.

Maximum temperature setting: maximum heating output on both sides.



### Rotary air distribution control

Stepless control of air distribution to the upper area, from the fascia grilles and to the lower area.

The rotary switch can be turned through 360° in either direction. The 5 o'clock setting (broken line on scale) is the standard setting.

Examples of some rotary switch positions:



Standard setting: air emerges from the grilles in the fascia, a certain amount from the footwell outlets and a very small amount from the windscreen and side window outlets.



Air emerges from the footwell outlets and also from the windscreen and side window outlets.



Air emerges exclusively from the grilles in the fascia.



Air emerges from the windscreen and side window outlets.



Air emerges from the footwell outlets and a certain amount also from the windscreen and side window outlets.



### Rotary airflow volume control, left/right

The airflow volume can be set to four different stages. Standard setting: stage 2. A constant airflow volume is maintained at all road speeds.

The maximum airflow volume position with detent is for rapid defrosting of ice or for demisting the windscreen and side windows. In this position the temperature, airflow volume and air distribution settings are selected automatically in a single operation. When turned back to one of stages 1 to 4, the previous temperature and air distribution settings are resumed. The maximum position only achieves its full effect when the engine is warm.

#### Note:

Stage 1 is the minimum airflow volume needed for temperature regulation.



### Pushbutton for recirculated- air operation

This is recommended if the outside air is dusty or smells objectionable. The air already inside the car passes through the system repeatedly.

If the multi-functional steering wheel\* is fitted, recirculated-air operation can also be selected at the button in the steering-wheel impact pad (see Page 73).

#### Note:

Do not drive for too long with the system in the recirculated-air mode, as the quality of the air inside the car gradually deteriorates. If the windows fog over on the inside when the recirculated-air mode is in use, switch to fresh-air operation.



### Pushbutton for air condition- ing system

Switch on in warm, damp weather. The air entering the car from the outside and the air being recirculated are cooled, dried and heated up again to the selected temperature. The selected temperature, e.g. 22 °C, can be maintained. We recommend leaving the air conditioning system switched on permanently in the summer.





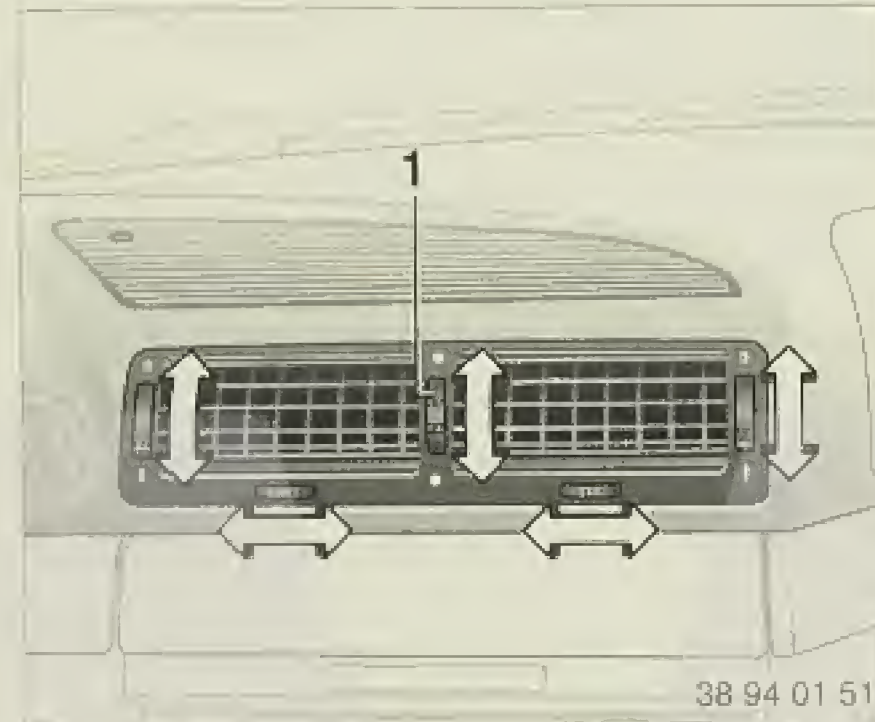
**Important notes on air conditioning system**

It is common for the windows to mist over temporarily after the engine has been started and with the air conditioning system on.

Do not run the air conditioning system in lengthy cool spells, otherwise the windows will tend to mist over. Frequent switching on and off in particular can cause condensation to form on the windows.

When the air conditioning system is running, moisture condensate produced by the evaporator is discharged under the car and may leave visible trails on the ground.

If the air conditioning develops any faults, for instance no cool air is delivered even when the controls are set accordingly, switch it off and consult a BMW service station without delay.

**Warm feet and a cool head:**

**Air distribution and stratified interior air temperatures for fatigue-free driving**

**Driver and front passenger:**

The direction of the air emerging from the **adjustable fascia grilles** can be varied according to individual preferences. The temperature can also be adjusted as desired. This does not affect the temperature of the air to the windscreen, side windows and footwells.

Knurled wheel 1 – towards red zone: warmer  
– towards blue zone: cooler

The maximum possible air temperature is the same as that of the air being directed on to the windscreen and side windows and into the footwells.

**Rear-seat passengers:**

Open and alter the direction of the grilles at the rear end of the centre console as required. These grilles supply fresh air only.

**Microfilter**

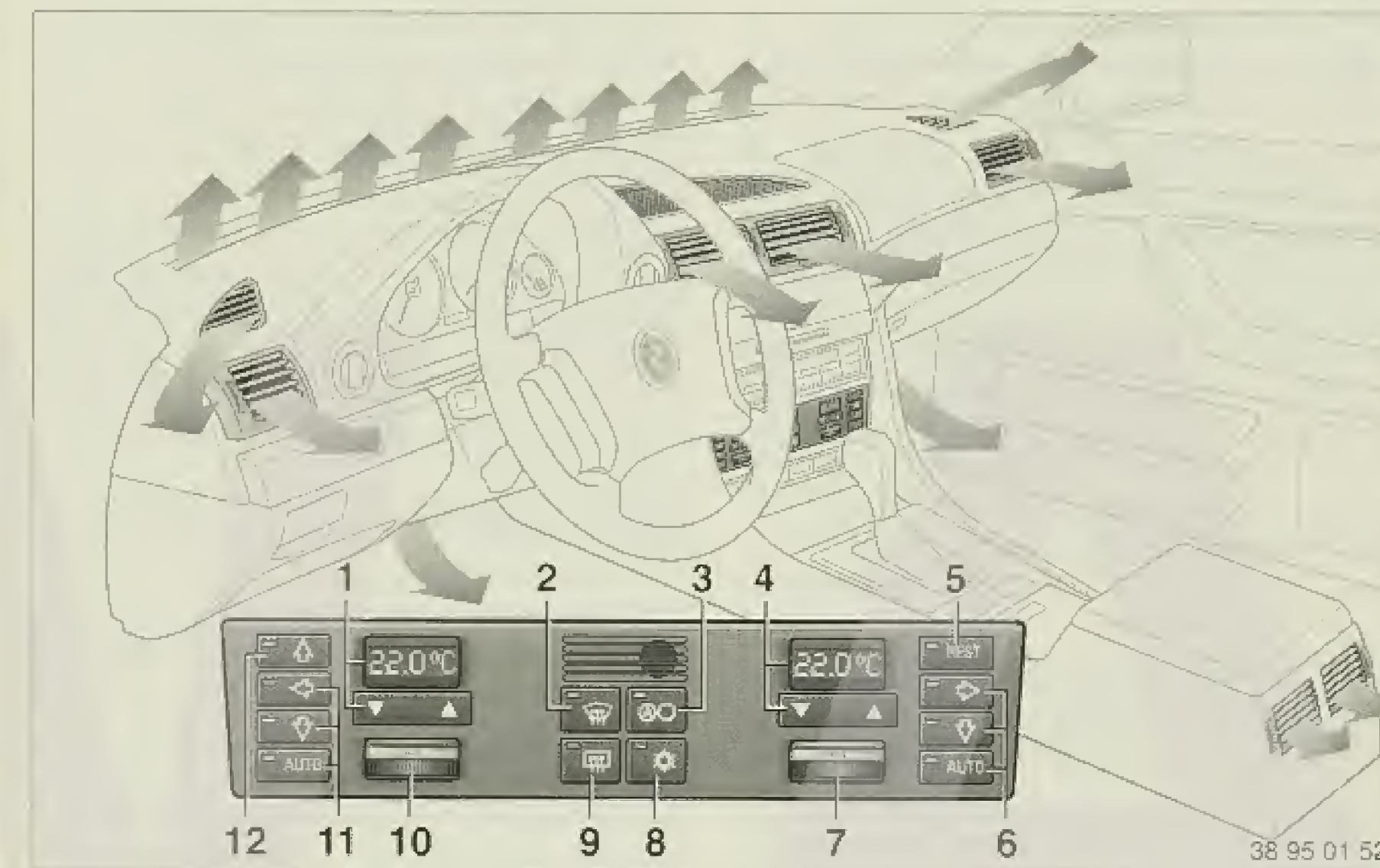
Fresh air is drawn in through a microfilter. This filters out up to 100% of all pollen and up to 60% of dust particles in the air. Change the filter at the car's regular servicing intervals. If airflow is noticeably less than usual, this may indicate that the filter should be renewed earlier.

**Activated charcoal filter\***

In addition removes gaseous pollutants from the air entering the car from the outside.

**Warning:**

**The car must not be run without the microfilter/activated charcoal filter fitted, as otherwise water could leak into the heating and electrical system, causing severe damage.**

**Automatic air conditioning\***

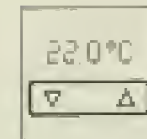
- 1 Temperature selector for left side of car, with display
- 2 Pushbutton for maximum windscreen and side window defrosting
- 3 Pushbutton for Automatic Recirculated Air Control (AUC) and recirculated air operation
- 4 Temperature selector for right side of car, with display

- 5 Pushbutton for residual heat
- 6 Program buttons for air distribution on right side of car
- 7 Airflow volume selector wheel for right side of car
- 8 Pushbutton for air conditioning system
- 9 Pushbutton for heated rear window, see Page 72

- 10 Airflow volume selector wheel for left side of car
- 11 Program buttons for air distribution on left side of car
- 12 Program button for air distribution to upper area of car







**Temperature selector for left and right sides of car, with display**

The interior temperature can be set to the nearest 0.5 °C by means of the buttons. The displays are merely intended as a guide. The standard setting is 22.0 °C, including with the air conditioning system on. The selected temperature is maintained by the control circuit.

Alter the settings by only small amounts at a time, to allow the selected temperature to be reached.

After the engine has been started, the control circuit ensures that the selected interior temperature is reached as rapidly as possible, regardless of the ambient temperature conditions. The temperature of the air emerging from the grilles is gradually adjusted to the selected value.

At both limit values of the driver's temperature selector, automatic temperature control for both sides of the car is switched off.

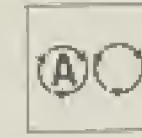
Minimum temperature setting: heating switched off on both sides, maximum cooling output when air conditioning switched on.

Maximum temperature setting: maximum heating output on both sides.



**Pushbutton for maximum defrosting of the windscreen and side windows**

The windscreen and side windows can be defrosted and demisted rapidly with this program in extreme conditions. For maximum effect, the engine must be at its regular operating temperature. When this function is switched off again, the previous temperature, airflow volume and air distribution settings are resumed.



**Pushbutton for Automatic Recirculated Air Control (AUC) and recirculated-air operation**

The system identifies peak pollutant loads in the outside air and prevents them from reaching the car's interior.

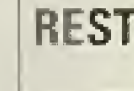
Three functions are obtained in succession by pressing this button repeatedly:

- Light-emitting diodes (LEDs) off: fresh air enters the car from outside, no recirculated-air operation.
- Left-hand LED on, AUC: if the air entering the car is polluted, the supply is shut off for a certain time and the system meanwhile switches over to recirculated-air operation.
- Right-hand LED on: outside air supply permanently shut off, recirculated-air operation only.

If the multi-functional steering wheel\* is fitted, recirculated-air operation can also be selected at the button in the steering-wheel impact pad (see Page 73).

**Note:**

Do not drive for too long with the system in the recirculated-air mode, as the quality of the air inside the car gradually deteriorates. If the windows fog over on the inside when the recirculated-air mode is in use, switch to fresh-air operation.



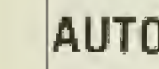
**Pushbutton for residual heat**

The engine's residual heat is used to continue heating the interior after the ignition has been switched off, e.g. when waiting at a level crossing.

In ignition key position 1, all automatic air conditioning functions are maintained. In ignition key position 0, the heated air is automatically distributed exclusively to the windscreen, side windows and footwells.

This function is only available at low outside temperatures and for a limited period of time (16 minutes), with the engine warm and the battery sufficiently charged.

**6, 11 Program buttons for air distribution, left/right side of car**



The air is distributed automatically according to the ambient/interior temperature and the temperature selected for the left/right side.

This program responds to outside influences and is suitable for obtaining a pleasant interior temperature in virtually all weather conditions.

The air emerges at the following points:

**For upper area:** defroster outlets to the windscreen and front side windows, grille on top of fascia for indirect ventilation.

**For occupants:** directionally controllable grilles in the fascia; variable-flow, directionally controllable grilles for rear ventilation at the rear end of the centre console.

**For lower area:** footwell outlets at front and for rear area.

If the AUTO button for the driver's side has been pressed, after a cold start air initially emerges only from the windscreen defroster outlets until the engine has reached its normal operating temperature.

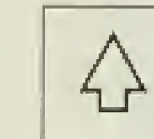
The air distribution programs described below allow individual preferences to be satisfied. Either press the desired button or switch off the AUTO button: the previous individual settings are resumed.

The light-emitting diode (LED) in the button indicates that the program is active.

Different programs can be selected for the left and right.

Several different programs can be selected simultaneously for each side of the car.

If all buttons are switched off, the AUTO program runs.

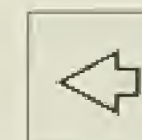


The same amount of air emerges from the defroster outlets on the driver's and front passenger's side.

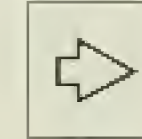
Recommended in cool, damp weather to prevent condensation from forming on the windows inside the car. If necessary, increase the airflow volume. Air distribution settings for the front passenger's side are heeded.

**Note:**

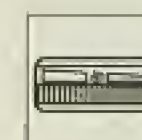
When the air conditioning system is in operation in warm, damp weather, condensation may form on the outside of the windscreen: switch off at this button.



Air emerges only from the grilles in the fascia and on the top of the fascia.



Air emerges only from the front footwell outlets and from the rear outlets.



**Airflow volume selector wheel, left/right side of car**

The airflow volume on the driver's and front passenger's side can be adjusted individually: the centre (detent) position is recommended as the standard setting. The airflow volume is maintained at a constant level regardless of the road speed. The airflow volume increases steplessly as the wheel is turned to the right.

At both limit (detent) positions the **driver's-side selector wheel** overrides it: "0" position: system off, no air emerges, windows tend to mist over. "Maximum airflow" position: front passenger's selector wheel setting is ignored.







### Pushbutton for air conditioning system

Switch on in warm, damp weather. The air entering the car from the outside and the air being recirculated are cooled, dried and heated up again to the selected temperature. The selected temperature, e.g. 22.0 °C, can be maintained.

We recommend leaving the air conditioning system switched on permanently in the summer.

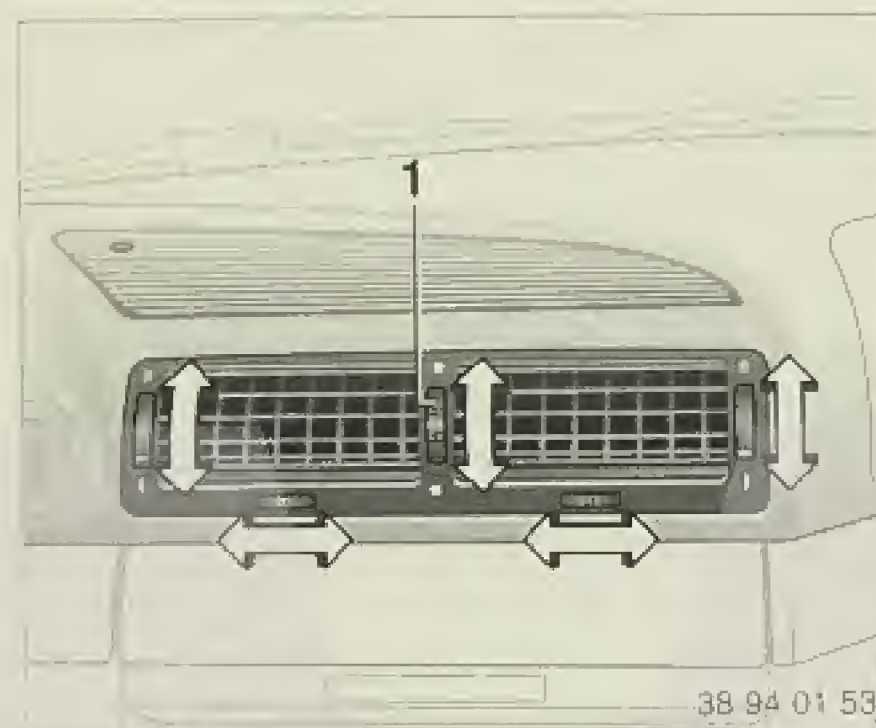
### Important notes on air conditioning system

It is common for the windows to mist over temporarily after the engine has been started and with the air conditioning system on.

Do not run the air conditioning system in cool weather, otherwise the windows will tend to mist over. Frequent switching on and off in particular can cause condensation to form on the windows.

When the air conditioning system is running, moisture condensate produced by the evaporator is discharged under the car and may leave visible trails on the ground.

If the air conditioning develops any faults, for instance no cool air is delivered even when the controls are set accordingly, switch it off and consult a BMW service station without delay.



### Warm feet and a cool head:

**Air distribution and stratified interior air temperatures for fatigue-free driving**

### Driver and front passenger:

The direction of the air emerging from the **adjustable fascia grilles** can be varied according to individual preferences. The temperature can also be adjusted as desired. This does not affect the temperature of the air to the windscreen, side windows and footwells.

Knurled wheel 1 — towards red zone: warmer  
— towards blue zone: cooler

The maximum possible air temperature is the same as that of the air being directed on to the windscreen and side windows and into the footwells.

### Rear-seat passengers:

Open and alter the direction of the grilles at the rear end of the centre console as required. The temperature of the air emerging from both grilles can be adjusted at the right-hand knurled wheel.

### Microfilter

Fresh air is drawn in through a microfilter. This filters out up to 100% of all pollen and up to 60% of dust particles in the air. Change the filter at the car's regular servicing intervals. If airflow is noticeably less than usual, this may indicate that the filter should be renewed earlier. There is also a dust filter for recirculated-air operation.

### Activated charcoal filter

In addition removes gaseous pollutants from the air entering the car from the outside, and enhances the effect of the Automatic Recirculated Air Control (AUC). Frequent use of the AUC reduces the burden on the activated charcoal filter.

### Warning:

**The car must not be run without the microfilter/activated charcoal filter fitted, as otherwise water could leak into the heating and electrical system, causing severe damage.**



### Check Control

System malfunctions are shown in plain text; information is provided and a gong warning sounded in ignition key position 2.

- 1 CHECK button
- 2 Fault display symbol
- 3 Display

A system of three priority categories has been adopted for the fault signals:

### Priority 1

These **faults are indicated** by means of a gong signal and flashing **symbols** (2). If several faults develop simultaneously, they are displayed in succession. These displays remain active until the fault is rectified, and cannot be cleared with the CHECK button (1).

### RELEASE PARKINGBRAKE

This signal appears shortly after the car has begun to move.

### CHECK BRAKE FLUID

Brake fluid level is close to the minimum mark. Top up at the earliest opportunity. See Page 93. Have the cause of brake fluid loss rectified by a BMW service station.

### STOP! ENGINE OILPRESS

Engine oil pressure has dropped too low. Stop the car immediately and switch off the engine. See Page 11.

### COOLANT TEMPERATURE

The temperature is too high. Stop the car immediately and switch off the engine. See Pages 13 and 94.

### SPEED LIMIT\*

Displayed if the car is driven faster than the maximum national speed limit. However, you must also comply with all regulations calling for a lower speed limit.

### Priority 2

These malfunctions are displayed for 20 seconds in ignition key position 2. After the text displays have gone out, symbols remain visible to indicate that there are further fault messages in the memory. Press the CHECK button to call them up.

### ENGINE FAILSAFE PROG\*

Engine control system malfunction. Consult your BMW service station.

### BOOTLID OPEN

Appears only when the car is driven away for the first time.

### DOOR OPEN

Appears when the car exceeds a specific low speed.

### FASTEN SEAT BELTS\*

The indicator lamp with belt symbol also lights up.





# CHECK BRAKE LIGHTS

A bulb has failed or the circuit is defective. See Page 110.

# CHECK LOWBEAM LIGHTS

# CHECK PARK LIGHTS

# CHECK TAIL LIGHTS

# CHECK FRONT FOGLAMPS

# CHECK REAR FOGLIGHTS

# CHECK NUMPLATE LIGHT

# CHECK TRAILER LIGHTS

# CHECK HIGHBEAM LIGHT

# CHECK REVERSE LIGHTS

A bulb or the circuit is defective. See Pages 108 and 98, or take the car to a BMW service station.

# TRANS. FAILSAFE PROG

Defective electronic control unit on automatic transmission cars. See Page 49.

# CHECK BRAKE LININGS

The brake pads are worn. See Page 96.

# WASHER FLUID LOW

Top up at the next opportunity. See Page 95.

# CHECK ENGINE OIL LEV

Engine oil level has dropped to near the permissible minimum.

Add oil at the next opportunity (for instance when refuelling). See Page 91.

# REMOTE KEY BATTERY

Renew the battery.

After changing the battery, the remote control transmitter must be initialized (unless it has taken less than 1 minute to change the battery and none of the buttons is pressed). See Page 24.

# CHECK COOLANT LEVEL

Coolant level is too low; top up at the next opportunity. See Page 94.

# Messages displayed at the end of a journey

All malfunctions which have been indicated during a journey are displayed again in succession when the ignition key is turned back to position 0.

Even with the ignition key removed and the display blank, you can recall fault messages with the CHECK button for up to about three minutes after the end of a journey; if several messages were displayed, press the CHECK button as many times as necessary.

The following information is also provided if appropriate:

# LIGHTS ON

Displayed at the end of the journey (when the driver's door is opened).

# KEY IN IGNITION LOCK\*

A gong signal is also heard.

# Testing the Check Control display

In ignition key position 2, press the CHECK button: the display should show

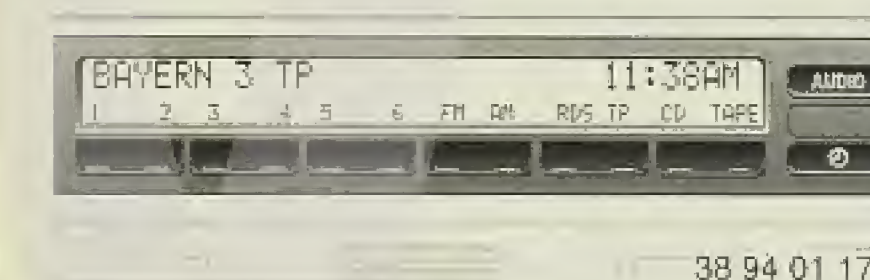
# CHECK CONTROL OK.

There are no malfunctions in the systems monitored.

# Multi-Information Display (MID)

The MID allows several on-board systems to be displayed and operated by way of a single central unit. Depending on the equipment specification, the various MID versions have different function keys. The following on-board systems can be displayed:

- Digital clock (time, date)
- Audio systems (radio, cassette, CD)
- On-board computer (e.g. fuel consumption, range)
- Telephone\* (e.g. dialling)



Audio system with digital clock



Audio system, digital clock and on-board computer



Audio system, digital clock, on-board computer and telephone

Explanations and operating instructions for the **digital clock** and the **on-board computer** are given on the following pages. Operating instructions for the audio systems, the telephone and the on-board monitor are given in supplementary owner's handbooks.

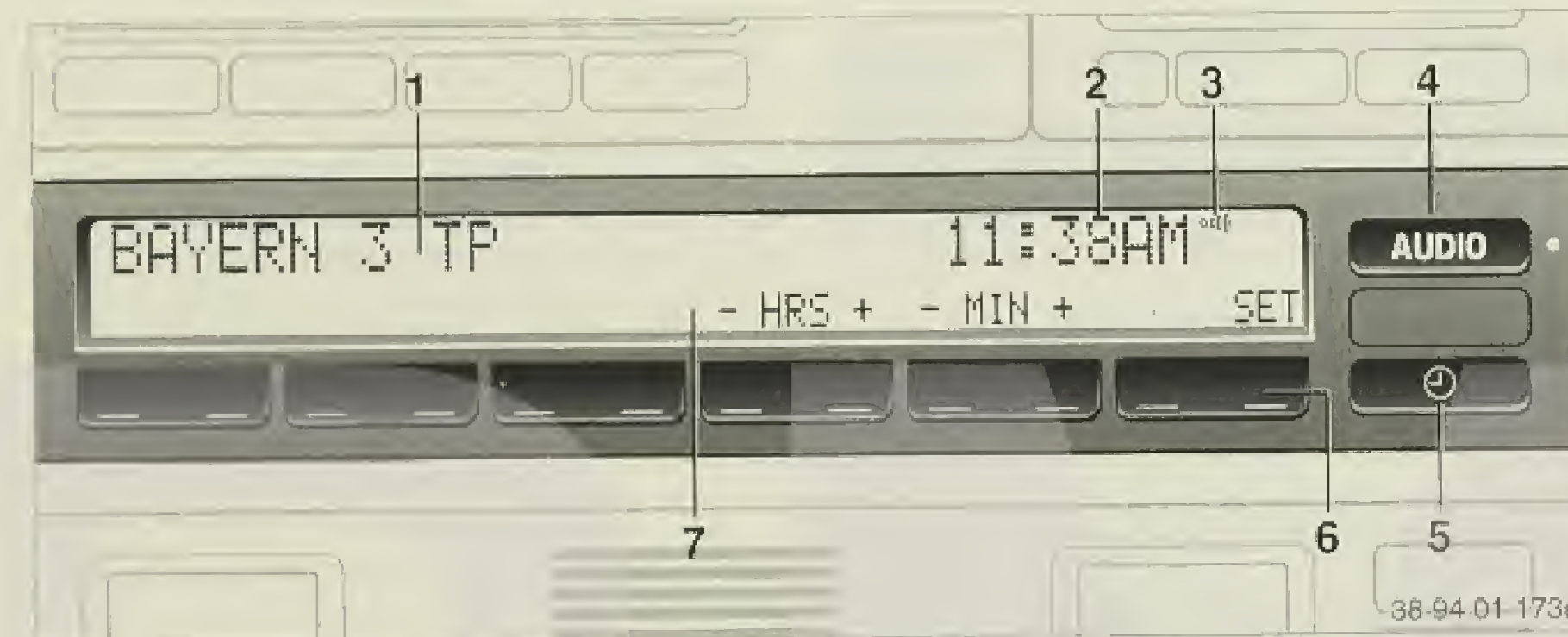
# Note:

Unrealistic numerical inputs are not accepted by the computer.

If the power supply is interrupted, all the stored data are erased. After restoring the power supply the time and possibly also the switch-on times for independent heating/independent ventilation control, distance and speed limit values must be input again.







### Digital clock

The digital clock can be used to

- display time and date
- program a reminder signal (Memo) every hour, for instance so that radio news bulletins are not missed
- operate the stopwatch function or
- operate the independent heater/ventilation

- 1 Display for audio system (see supplementary owner's handbook for operating instructions)
- 2 Time and date display
- 3 Sound-wave symbol for memo function active
- 4 Audio system key
- 5 Digital clock function key
- 6 Input and call-up keys for hour, date and audio system
- 7 Display for input and call-up keys

### Calling up time and date:

– Press the function key (5).

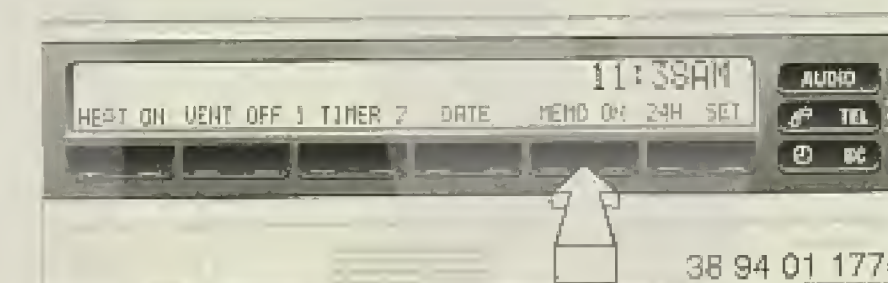
In ignition key position 0 or with the ignition key removed, the time appears for eight seconds; in ignition key position 1 and beyond, the desired display remains visible.

You can have the time displayed as a 12- or 24-hour clock and the date in European or American order. Changeover:

- Press the digital clock function key.
- Press the display unit changeover key (12/24-hour).

When the 12-hour clock is in use, the letters AM or PM appear after the time.

### Entering and activating a reminder signal:

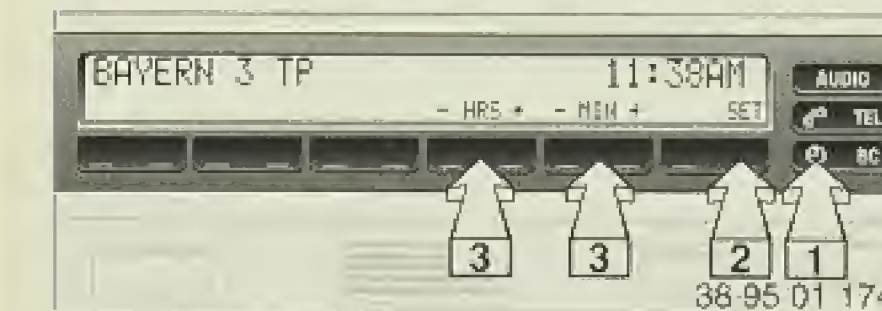


Press the digital clock function key.

Press the MEMO ON/OFF key to switch the hour signal on or off.

A sound-wave symbol appears in the display to indicate that the MEMO function is in use and a time signal is heard 15 seconds before each full hour.

### Altering the time display:



Press the digital clock function key.

Press the SET key; the dots in the display flash.

Enter the time via the input keys – HRS + and – MIN +.

Conclude the input by pressing SET.

### Altering the date display:



In the date function, press the SET key; the dots in the display flash and DATE appears.



Input the date and year digits and conclude the input by pressing SET. (The device takes leap years into account, so that no special manual adjustment is necessary.)

### Time and date inputs after a power supply interruption:

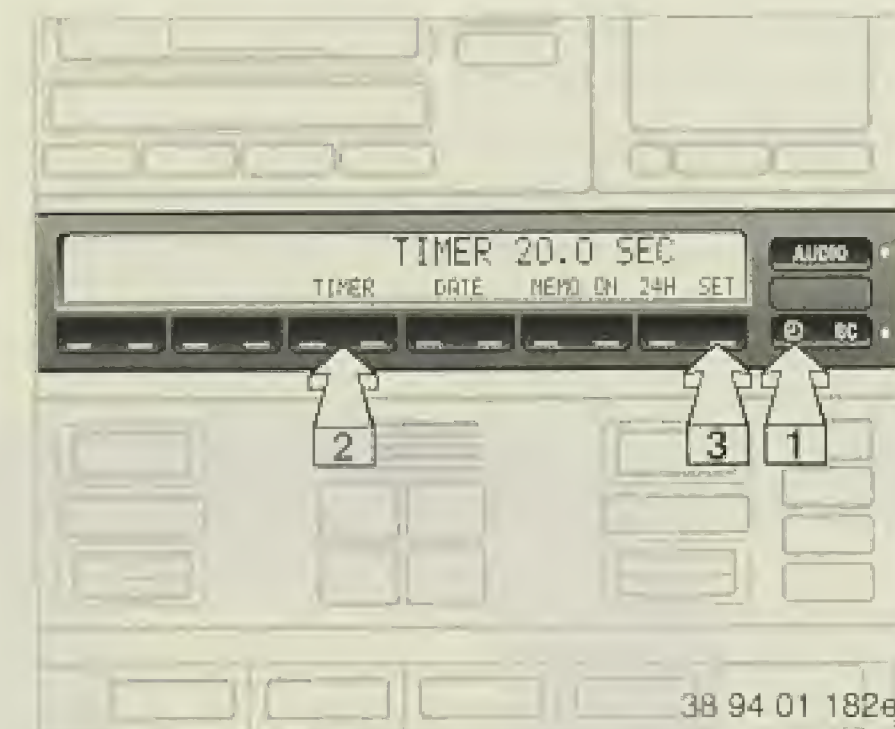
Press the digital clock function key.

The dots in the display flash.

- Enter the time at the – HRS + and – MIN + keys.
- Press SET. The clock will start to run.
- Enter the date at the – DAT +, – MONTH + and – YEAR + keys.
- Press the SET key.







### Stopwatch

The stopwatch function is only available on cars without independent heating/independent ventilation control. It runs for 99 hours, 59 minutes. The time appears in the display: at first in seconds and tenths of a second, after one minute in minutes and seconds, and after one hour in hours and minutes.

#### Start:

Press the keys as illustrated.

The clock symbol on the right of the display comes on and the cumulative time is shown in the display.

#### Stop:

With the time displayed

– Press SET.

If any other information is displayed:

– Press keys in the order illustrated and press SET.



### Obtaining intermediate time value:

Call up TIMER function as illustrated.

– Press TIMER key.

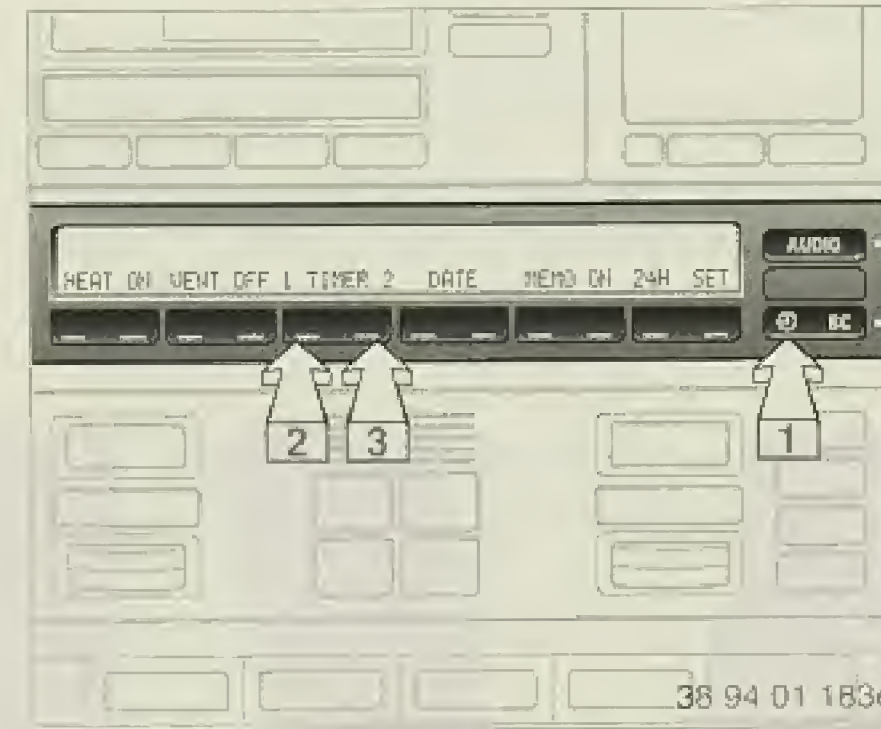
The clock symbol flashes, the intermediate time is displayed and the stopwatch continues to run.

### Obtaining main stopwatch time display again:

– Press TIMER key again.

#### Note:

The stopwatch ceases to run in ignition key position 0, but runs again in ignition key position 1.



### Independent heater and independent ventilation control

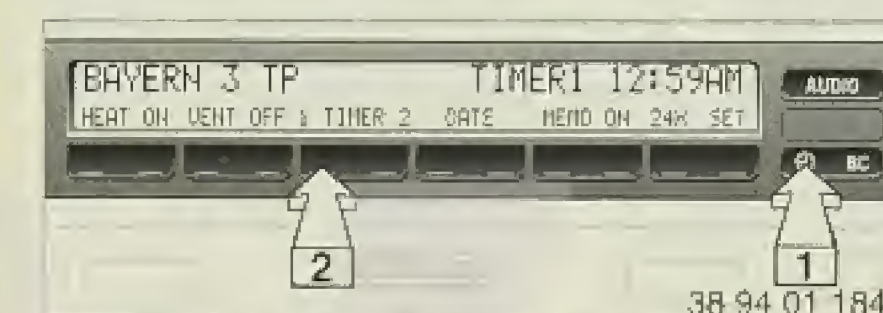
#### Input of switching times

You can preselect two switch-on times for the independent heater or ventilation control. The heater or ventilation is switched off automatically after 30 minutes.

**For important information on operating the independent heater/ventilation control, see Page 72.**

### Input of first switch-on time:

Input is possible only if the digital clock is running and the ignition key is in position 1. Press the keys in the order illustrated.



Press SET key. Enter the desired time with the – HRS + and – MIN + keys, then press the SET key.

### Input of second switch-on time:

Press the keys again as illustrated, but press TIME 2 once only to call up.

### Correcting the time input:

Press the keys in the same order as for the first/second switch-on time, selecting a different time input.

The LED in the MID comes on to indicate that a switch-on time has been preselected.

The LED flashes while the heating or ventilation is actually in operation, and goes out when they are switched off.

### To check a previous switch-on time input:

– For the first switch-on time, press the keys as for the first time input.

– For the second switch-on time, proceed likewise but pressing TIME 2 to call up the time.

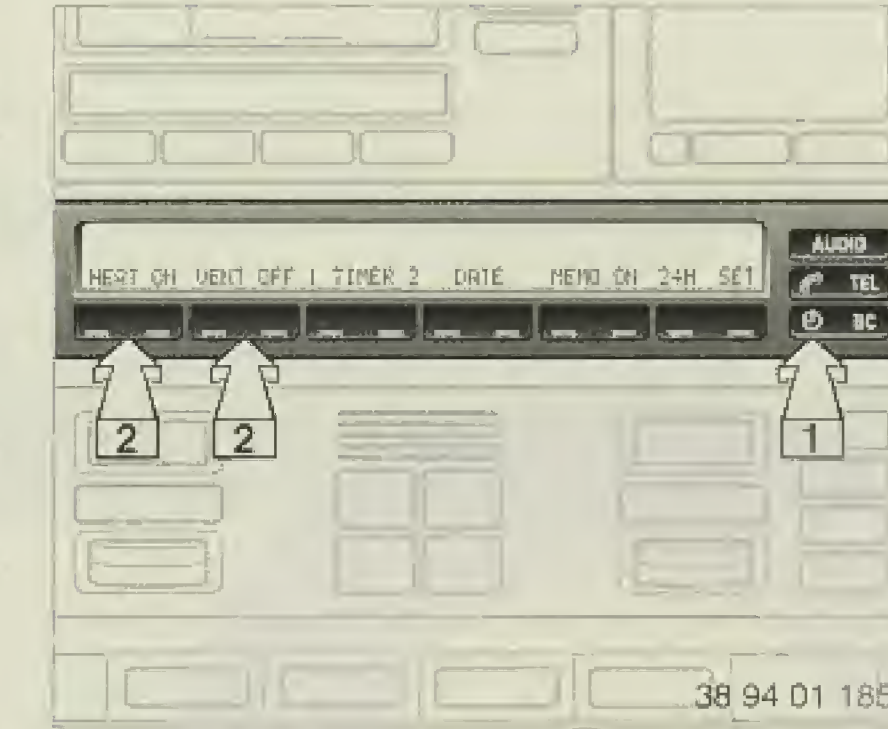
The switch-on time inputs can be activated (heating or ventilation starts – LED comes on) and deactivated (LED goes out) at the specified times.

Press 1TIMER2 after selecting the desired switch-on time.

The switch-on times remain stored until cancelled by a new input.

#### Note:

With a switch-on time set, independent ventilation control is automatically selected at an outside temperature above 16 °C and independent heating at a temperature below 16 °C.



### Direct switch-on

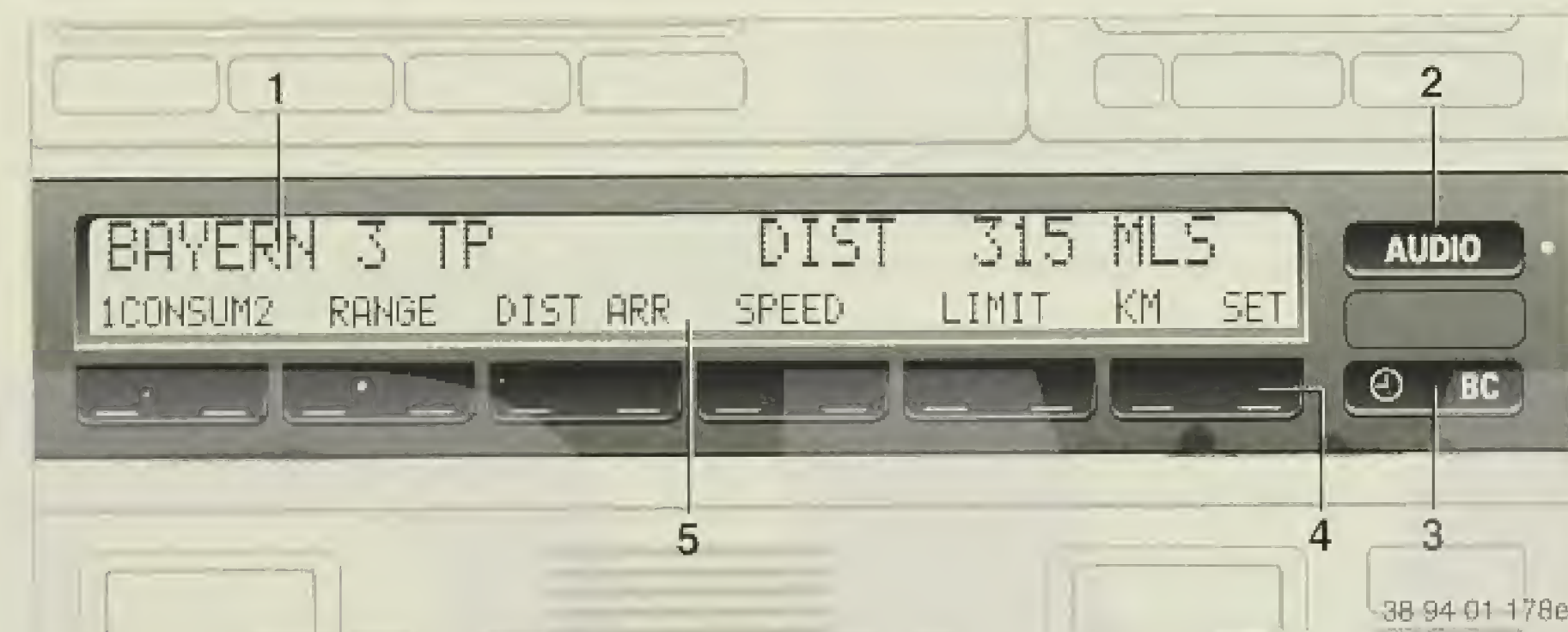
This is only possible in ignition key position 1.

Press the keys in the order illustrated (HEAT ON or VENT ON).

### Direct switch-off

In ignition key position 1, press the keys in the order illustrated (HEAT OFF or VENT OFF).





### On-board computer\*

The on-board computer can be used to call up and display information which contributes towards safe, economical driving.

The button with the clock symbol can be used to

- call up time and date
- program a reminder signal (Memo) every hour, for instance so that radio news bulletins are not missed.

See Page 60 for further details and notes on operation of the digital clock.

- 1 Display
- 2 Function key for audio system
- 3 Function key for digital clock and on-board computer
- 4 Input and call-up keys for audio system, digital clock and on-board computer
- 5 Display for entry and call-up keys

### Available without previous inputs:

		Page
1 CONSUM 2	2 average fuel consumptions	65
RANGE	Probable range	65
SPEED	Average speed	65

### After manual inputs:

DIST ARR	Distance before destination is reached, with time of arrival	66
LIMIT	Speed limit	67
CODE	Immobilizing device for added security	67

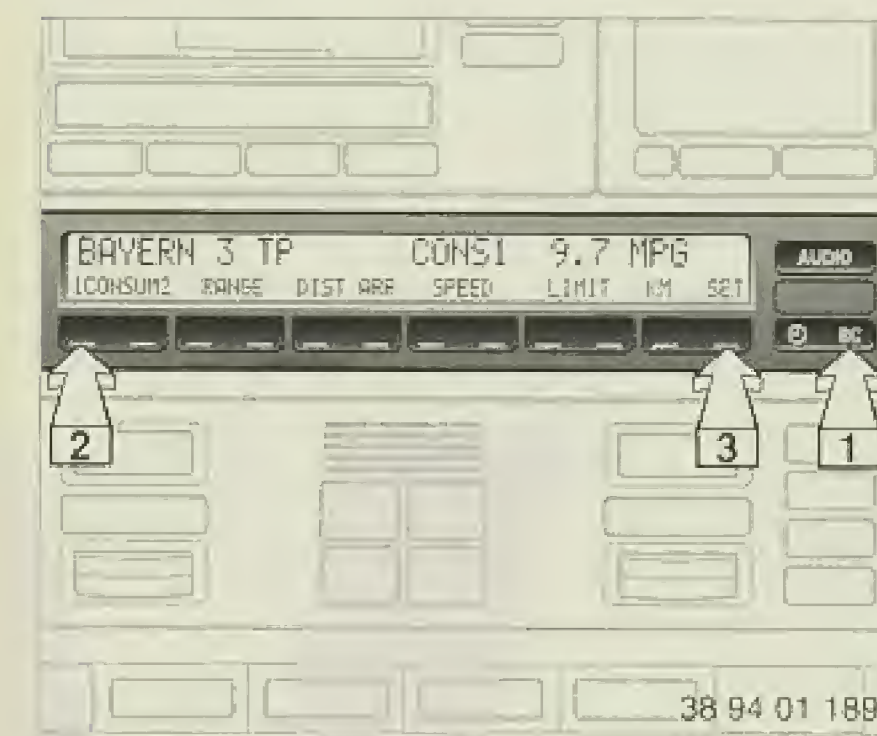
The on-board computer can be operated from ignition key position 1 onwards.

For reasons of driving safety, always input data to the computer before starting your journey or when the car is at a standstill. The computer calculates and memorizes data from the start of the journey onwards.

Information can also be displayed by operating a remote control; see Page 68.

The display unit changeover key (KM/H/MPH) enables information to be displayed either in metric or Imperial units of measurement.

If the "EEPROM-IKE" fault display appears, consult a BMW service station.



### Average fuel consumption

Average fuel consumption can be computed in parallel for two different distances, for instance a complete journey and one section of the journey.

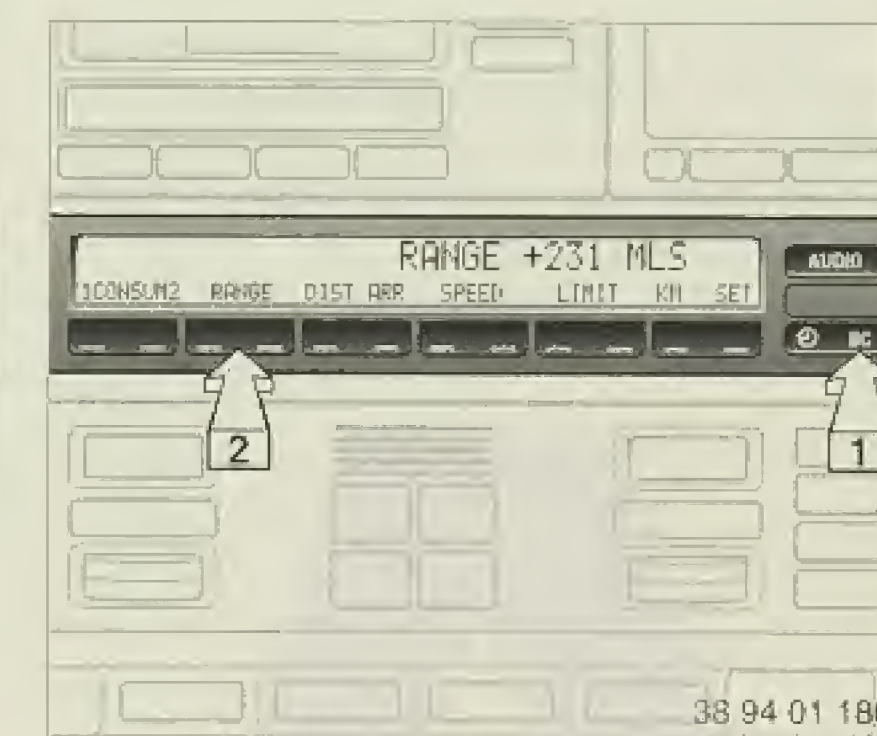
#### To start computing for distance 1:

Press the keys in the order illustrated.

#### To start computing for distance 2:

Proceed as for distance 1, but pressing key 2 to select. Fuel consumption is calculated from the moment the function is called up with the engine running and the SET key is pressed once the journey has started or during a journey.

**To display:** Press the BC key and CONSUM 1 or 2.



### Probable range

This display indicates how far the car can probably be driven on the fuel remaining in the tank. The fuel level is measured and the range calculated on the basis of the way in which the car has so far been driven. The average fuel consumption over the last 30 kilometres serves as a reference value for this purpose.

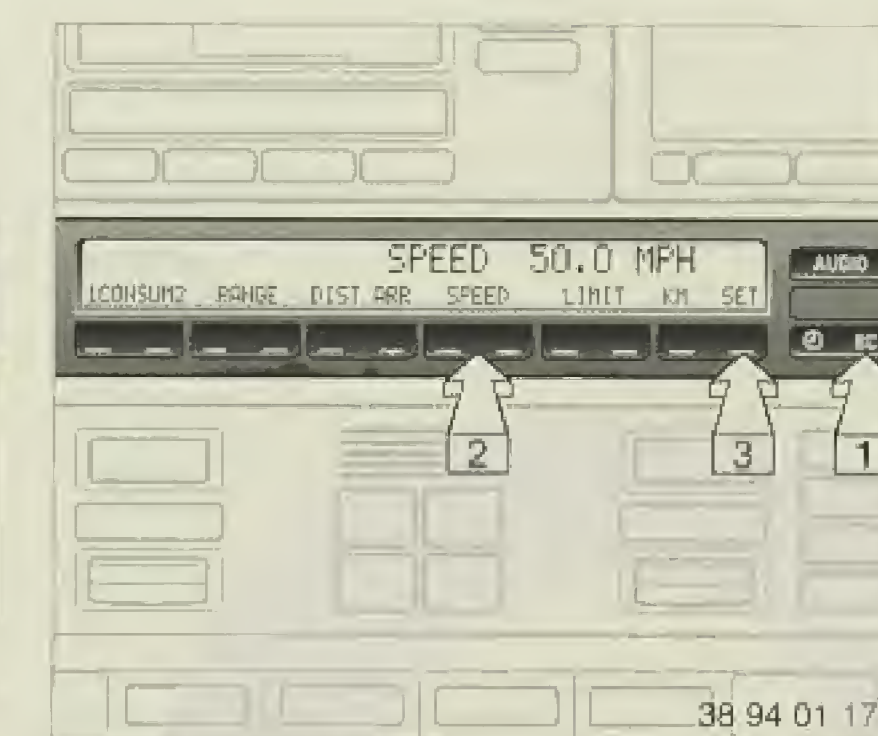
#### To display:

Press the keys in the order illustrated.

If the range is below 50 km, this appears briefly in the instrument cluster.

The car should then be refuelled as soon as possible, as the engine and catalytic converter could otherwise become damaged. The on-board computer registers fuel added to the tank only

- if the quantity of fuel exceeds 4 litres and
- when the engine has been stopped.



### Average speed

#### To start computing:

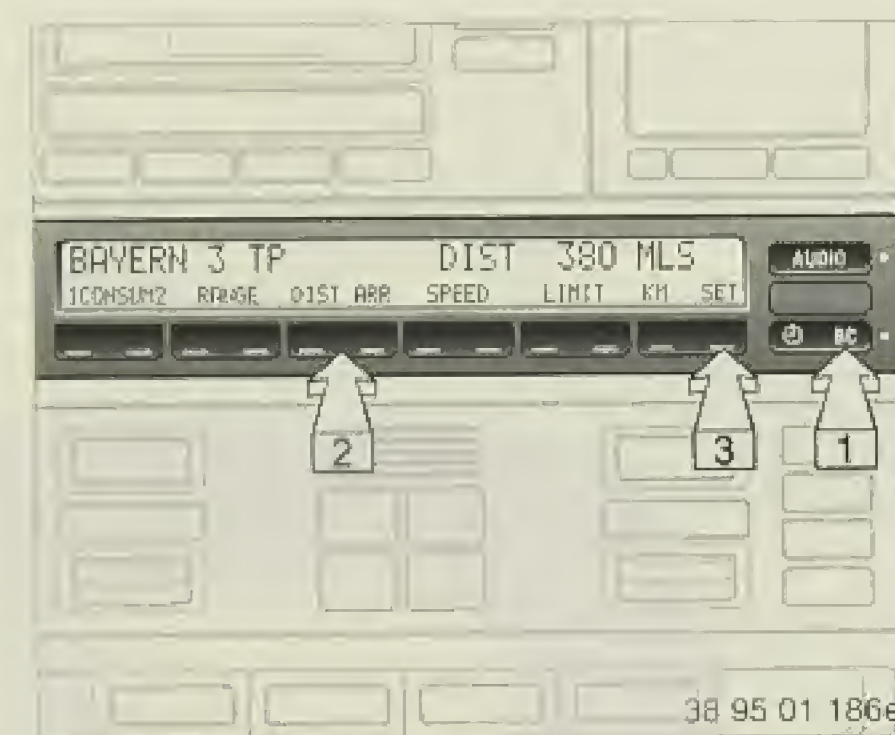
Press the keys in the order illustrated. The average speed is calculated from the moment the function is called up with the engine running and the SET key is pressed once the journey has started.

**To display:** press the SPEED key.

With the engine running, the average speed since the SET key was last pressed is calculated.

If less than 100 km/h, the speed is displayed to one decimal place.



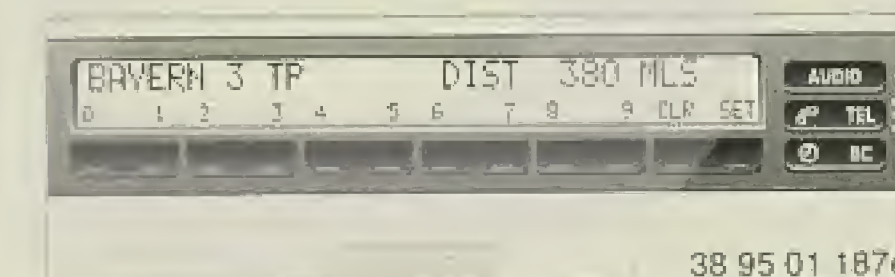


#### Distance from destination

Shows how far the car is from the destination, provided the total distance was input before the journey started.

#### Distance input:

Press the keys in the order illustrated.

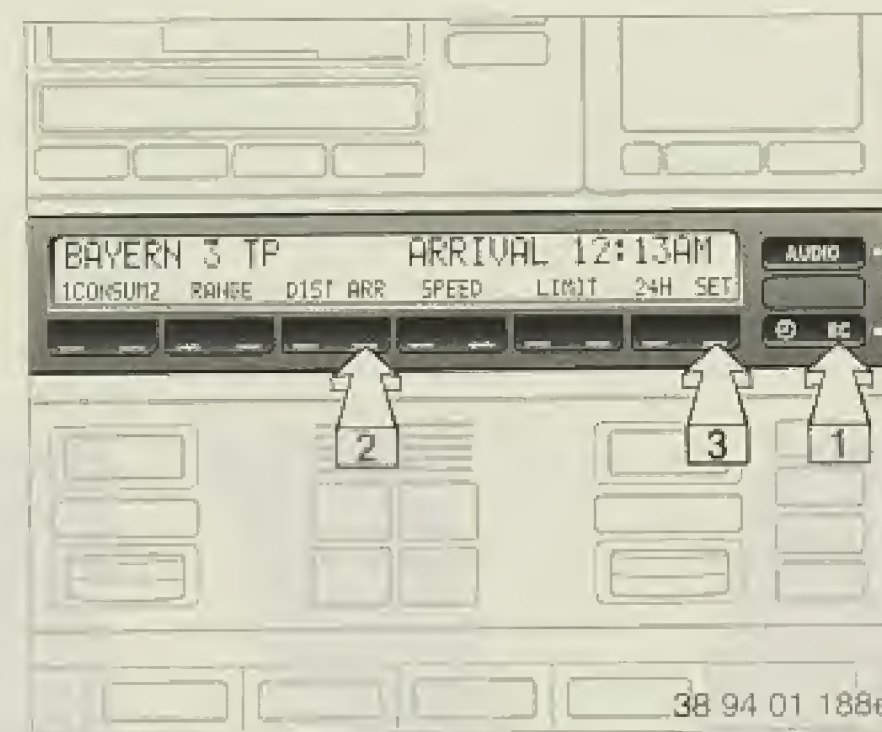


Enter the distance at keys 0 – 9 and press SET to confirm. Use the CLR key to correct inputs. Press once to erase the last digit.

**To display:** press the BC and DIST keys. If the car has already completed the full distance which was input at the start of the journey, the distance value is preceded by a minus sign.

#### Display units changeover:

Press KM/MLS changeover key once.



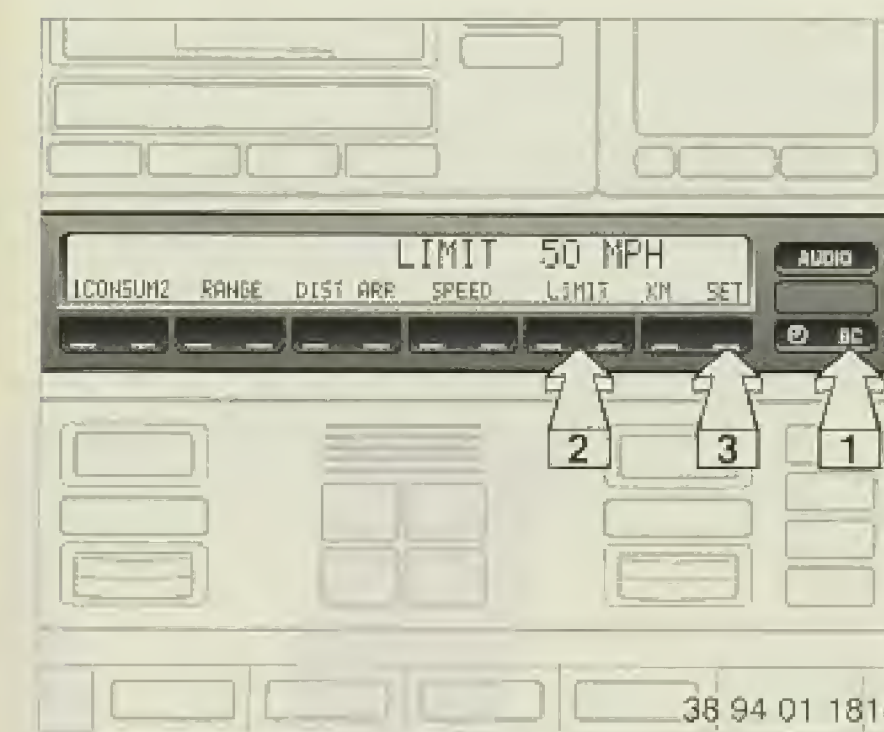
#### Expected arrival time

The probable time of arrival, which is recalculated continually as driving conditions change, is displayed.

The distance (DIST) must first have been entered before the start of the journey.

Press the keys in the order illustrated.

**To display:** press the BC and ARR keys.



#### Speed limit

If you exceed a speed limit which you have previously input (for instance in order not to infringe legal road-speed limits), a warning will be given. You will hear a warning gong, the LIMIT display on the right flashes and the stored limit appears for 8 seconds in the Check Control in the instrument cluster.

For a warning to be repeated, the car's speed must first drop by at least 5 km/h below the speed limit.

#### Speed limit input:

Press the keys in the order illustrated. Use digit keys 0 – 9 and confirm with SET.

Use the CLR key to correct inputs. Press once to erase the last digit.

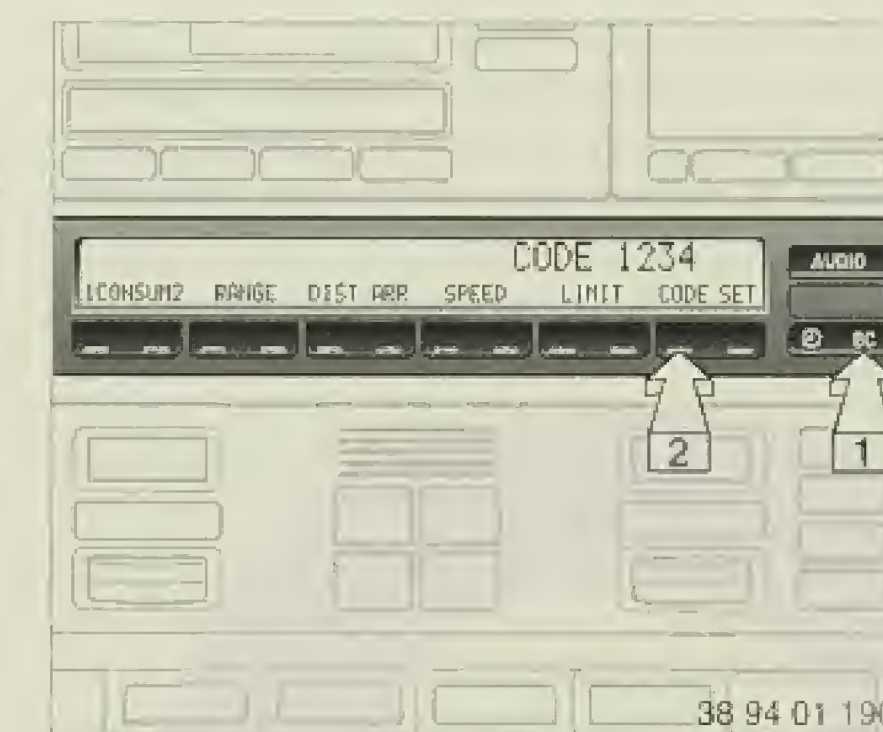
#### Cancelling the speed limit input:

– Press the BC key and the LIMIT key twice.

LIMIT disappears from the display, but the stored value is not lost and can be re-activated with the LIMIT key.

#### Adopting the car's actual speed as the limit value:

– Press the BC and LIMIT keys, then the SET key twice.



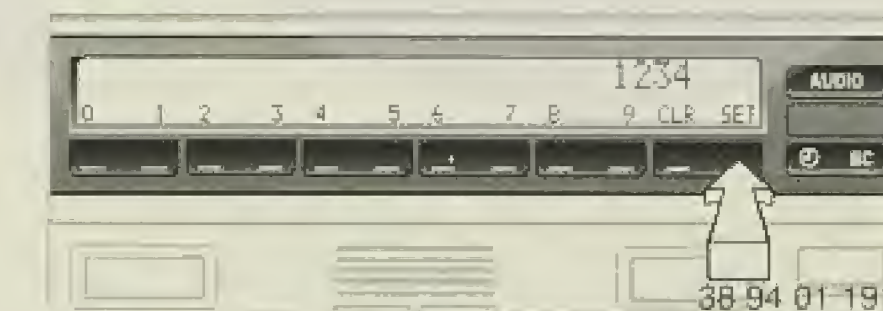
#### Immobilizing device for added security

Any attempts to start the engine are monitored.

The device is activated with a code number. Starting the engine is then impossible unless the code number is input correctly. For this reason: **always remember the code number!**

#### Activating in ignition key position 1:

Press keys in the order illustrated.



Enter the code at keys 0 – 9, press SET and then turn ignition key to position 0 and remove.



Any code number from 0000 to 9999 can be input. (The code number must be input each time the device is activated.)

Press the CODE key to correct the entire input, or CLR to correct individual digits.

## De-activating in ignition key positions 1 or 2:

The gong signal and the "— CODE" display call for the driver to input the chosen code number.

- Input the code number at the numerical input keys.
- Press the SET key.

If attempts are made to start the engine without a code input or if the code entered is incorrect, the gong will sound and the engine will not start.

If the correct code has been entered and confirmed with SET, the time is automatically displayed.

**The alarm will sound for 30 seconds after three incorrect code inputs or three attempts to start the engine without a code input.**

If the code number has been forgotten, proceed as follows:

- Disconnect the battery, then reconnect it after approx. 2 minutes. The alarm will sound.
- Turn the ignition key to position 1.
- A time display will appear and run down for 10 minutes.
- After 10 minutes, the engine can be started.



If the code number becomes available again during this 10-minute waiting period, it can be input after the CODE key has been pressed.

## Remote control

The flashing turn indicator lever can also be operated to obtain a display of on-board computer information.

### Input:

- Press the turn indicator lever in until the display shows "PROG 1".
- Press the buttons on the MID in the appropriate order for the information you require.  
The program number appears in the display for each input.
- Press the SET key.

If you wish all the information to be accessible:

- Press the turn indicator lever in until "PROG 1" appears in the display.
- Press SET.

### To display:

Operate the turn indicator lever briefly.



## Park Distance Control (PDC)\*

When activated, four ultrasonic sensors in the front and rear bumpers measure the distance from the nearest object and indicate it by means of an audible signal.

The measuring zone for the four front sensors and the two rear corner sensors starts app. 30 cm (1 ft) away from the bumper and ends at about 60 cm (2 ft). The width of the measuring zone for the two central sensors at the rear is app. 1.50 m (5 ft).

The distance from objects at the front of the car is indicated by a high-pitched intermittent tone and from rear by a low-pitched intermittent tone. As the car approaches the external obstruction, the warning signal sounds at more frequent intervals, changing to a continuous tone if the object is less than 30 cm away.

The system is **activated automatically** in ignition key position 2 when reverse is selected at the manual gearbox or position R at the automatic-transmission selector lever.

It can be **switched on and off manually** at the button (arrow) on the centre console (telltale light comes on or goes off as appropriate).

If the car is driven for more than approx. 50 metres or reaches a speed of approx. 30 km/h, the system is shut down and has to be reactivated when required.

If the car does not approach an obstruction identified by the corner sensors more closely, for example if it is driven parallel to a wall, the warning signal is interrupted after three seconds.

Any malfunction is indicated by a short, continuous tone and the flashing telltale (or by the telltale only when the system is activated by engaging reverse).

Switch off the system and have the cause of the malfunction traced and rectified by a BMW service station.

### Note:

Despite PDC, it remains the driver's responsibility to detect obstructions and ensure that the car keeps clear of them, particularly since the physical limits of the ultrasonic measuring system can be reached at any time, for instance in the case of towing hitches and couplings and thin or painted objects. Obstructions in the dead area not covered by the sensors are not identified, nor is a warning signal emitted.

Keep the sensors clean and free from ice to ensure that they remain fully operational.

Do not spray the sensors with steam jets for any length of time, or from a distance of less than 10 cm.







### Electronic Damping Control (EDC)\*

This system automatically ensures that the desired degree of suspension damping is always provided, and thus enhances both safety and ride comfort.

#### Comfort program

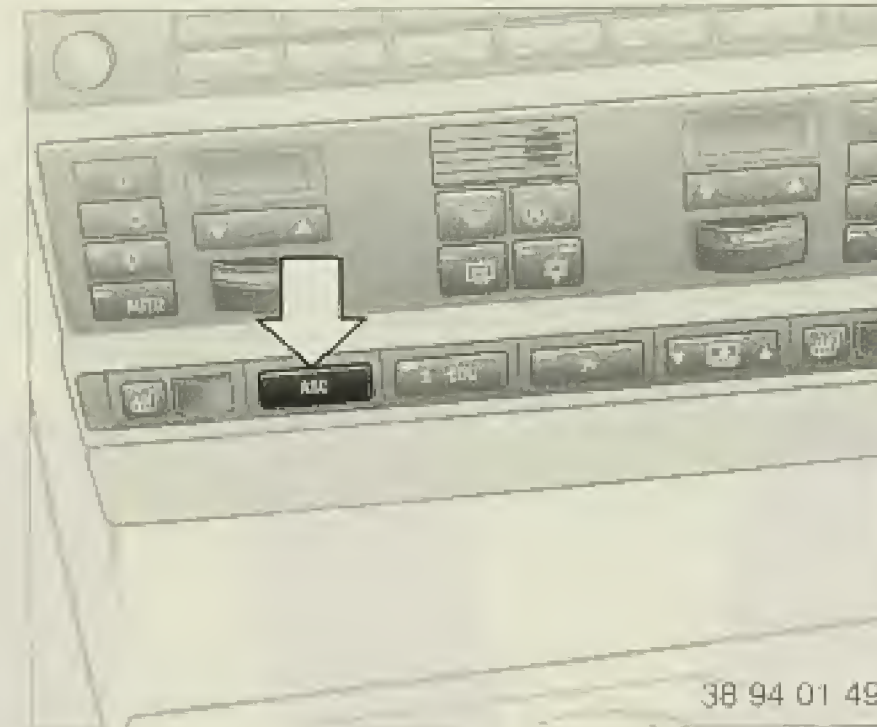
This program is always activated each time the engine is started. It can be retained throughout the car's entire speed range and with any load on the car. If the influencing factors vary (road surface quality or operating conditions such as steering, braking etc.), however, the damping force is adjusted in a few fractions of a second to suit the new situation.

#### Sport program.

In ignition key position 2, press the EDC key (arrow); the telltale next to the S comes on.

The sport program should be selected if consistently firm sports suspension settings are desired in all operating conditions.

To switch back to the comfort program: Press the key again; the telltale goes out.



### Automatic Stability Control plus Traction (ASC+T)\* / Dynamic Stability Control (DSC)\*

These systems improve driving stability, particularly when accelerating and cornering.

ASC+T prevents the driven wheels from spinning when driving conditions are unfavourable (smooth or slippery road surface), and ensures that the maximum possible amount of power can always be transmitted through the tyres to the road. DSC is an extended version of ASC+T; it also improves lateral dynamic stability (i.e. when cornering) by identifying and preventing unstable vehicle behaviour.

**The systems are active whenever the engine is started.**

The telltale light in the instrument cluster goes out shortly after the engine has been started.

#### To switch off the system:

Press the key; the telltale light will come on.

#### Note:

On vehicles fitted with DSC, the key is bears the lettering DSC.

#### To switch the system on again:

Press the button a second time; the telltale light will go out.

#### If the telltale light flashes:

The system is active, that is to say it is compensating for fluctuations in traction caused by the road surface.

#### If the telltale light does not go out after the engine has been started or comes on during the journey:

The system is defective, but the car itself is fully operational with the exception of the ASC+T/DSC stability control function. Take the car to a BMW service station to have the fault repaired.

#### Operating principle

High-precision sensors monitor wheel rotating speeds; on the DSC, the steering angle is also monitored. If differences are detected, or if discrepancies occur between the calculated values for steering angle and wheel rotating speeds on the DSC, the system interprets them as a sign that wheelspin is about to set in, and reduces the power input from the engine accordingly. If necessary, the rear wheel brakes are also applied momentarily to suppress wheelspin.

Although the action of this system may seem to be restricting available engine power and therefore be difficult for the driver to accept, it should be remembered that as much traction as can be achieved, and therefore optimum acceleration, are always available for the prevailing road, driving and climatic conditions, and also for the steering angle in conjunction with the DSC, without exceeding the limits of dynamic stability.

The system function of the brakes being applied generates a certain amount of noise.

#### Note:

Even with ASC+T/DSC, the basic laws of physics continue to apply. If the maximum possible speed in any given situation is exceeded, traction and lateral wheel location may be lacking. The driver alone is responsible for avoiding this situation. The additional safety potential offered by this system must never be understood as an invitation to take additional risks.

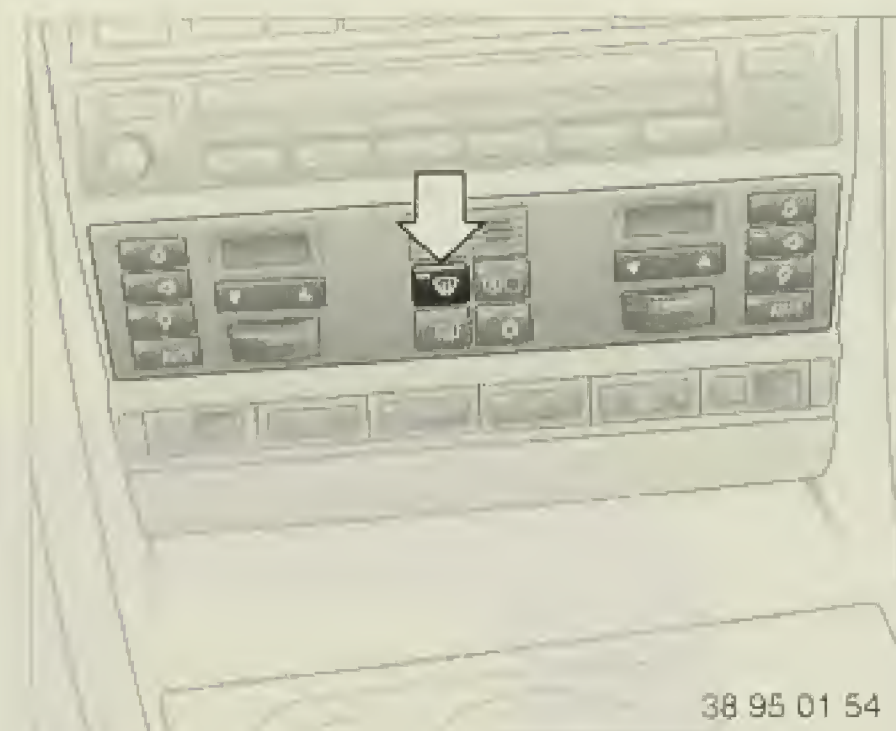
The system reacts sensitively if tyres of different makes and types are used on the same car. You should therefore try to ensure that all the car's tyres are identical in make, type and tread pattern.

By **switching off ASC+T/DSC** it is possible to revert to the conventional drive-line (without electronic control). It may be desirable, for instance, to switch off the system to ensure maximum potential traction

- if the car has to be rocked out of a hollow on a soft surface, or started in deep snow or on a loose surface (see "Car unable to move", Page 114).
- if snow chains are fitted.







38 95 01 54

### Heated rear window

**Press the button:** while the telltale light is on, the heated rear window is operating at full power (for rapid defrosting).

When the telltale light goes out, the heated rear window has cut out.

If necessary, press the button again: This will start a new rapid defrosting cycle, which remains on as long as the telltale is lit up.

**To switch off:** press the button if the telltale light is on.

Whenever the engine is restarted, the heated rear window has to be switched on again if still required. It cuts out if battery voltage is low.

### Independent heater\* and independent ventilation control\*

If your car has an independent fuel-burning heater, it is also equipped with independent ventilation control. However, independent ventilation control can also be installed on its own.

**Both systems are operated by way of the MID or the on-board monitor; see Page 62 or the separate operating instructions.**

#### Independent heater

The independent heater's operating period can be preselected so that the car's interior is already warm when the journey is due to start. Snow and ice are then easier to remove from the windows.

The heater runs for 30 minutes at a time. It can also be switched on and off directly. Since its current consumption is high, it should not be run twice in succession unless there has in the meantime been an opportunity to recharge the car's battery by a period of driving at reasonable speeds.

The independent heater can be run at outside temperatures below 16 °C and at any temperature when switched on directly, but not while the car is being driven.

The heated air is supplied automatically to the car's defrosting and footwell outlets; the heater runs at maximum output in all cases.

In ignition key position 1 you can vary the interior temperature (at the rotary temperature controls or temperature selection keys), the airflow volume (using the rotary airflow volume control) and the air distribution (at the air distribution rotary control or program keys for air distribution).

After it has been switched off (LED off) the independent heater continues to run for a short period. If the independent heater does not start after a maximum of **two attempts**, or switches itself off automatically, consult a BMW service station.

#### Note:

Even during the warm season of the year the independent heater should be switched on directly about once a month, then switched off again after about 5 minutes.

#### Warning:

**Never operate the independent heater in an enclosed space.**

**Always switch off the independent heater before refuelling the car.**

### Independent ventilation control

This system supplies air to the interior and lowers its temperature by means of the automatic air conditioning fan.

The switch-on time can be preselected; the system runs for a period of 30 minutes. It can also be switched on and off directly. Since its current consumption is high, it should not be run twice in succession unless there has in the meantime been an opportunity to recharge the car's battery by a period of driving at reasonable speeds.

Independent ventilation control is available at outside temperatures above 16 °C and at any temperature when switched on directly, but not when the car is being driven.

Air is delivered to the controlled-output, variable-direction grilles in the fascia. These grilles must therefore be opened before the independent ventilation control is switched on.

In ignition key position 1, the airflow volume and air distribution are adjusted in the same way as for independent heating.



38 94 01 110

### Multi-functional steering wheel (MFL)

The following keys are integrated into the steering-wheel impact pad

- various radio functions
  - recirculated-air control for the air conditioning system
  - cruise control and
  - various telephone functions
- to allow swift operation and maximum concentration on the traffic situation.

The illustration shows the maximum number of keys possible. For further details, see the description of the individual equipment items.

Individual systems must be active before they can be operated from the MFL.

- 1 Telephone: lift/replace receiver, start dialling and terminate call
- 2 Radio/telephone: changeover switch
- 3 Radio/telephone: reverse search
- 4 Radio/telephone: volume control
- 5 Radio/telephone: forward search
- 6 Cruise control: activate
- 7 Cruise control: store and accelerate (+), decelerate and store (–)
- 8 Cruise control: switch off
- 9 Air conditioning: recirculated-air operation on/off







38 94 01 60

### Glove box

**To open:** pull the handle. The light inside will come on automatically.

If necessary, the glove box can be swung down and pulled out for better access from the driver's seat.

**To close:** swing back in, then shut the lid.

**To lock:** push the small lever behind the glove-box handle to the right using the master key or a finger; it can then only be unlocked with the master key.

### Warning:

**To avoid the risk of injury, close the glove box immediately after use.**

### Rechargeable hand lamp

This is located inside the glove box on the left. The hand lamp is protected against overcharging and can therefore remain in its socket for an unlimited period.

### Important:

**Always switch the lamp off before inserting it into its socket.**

### Other storage compartments

Hinged compartment on left at side of steering column: to open the compartment, press the recessed area at the top; fold up the lid to close.

Compartment at sloping front end of centre console: to open, press the recessed area at the top; press shut to close.

This compartment is also available with a cassette or CD holder as optional extras.

Compartment on centre console between front seats: to open, reach into the recess and pull up.

If a telephone is installed, there is one compartment on either side of the telephone. To open, press the button at the side.

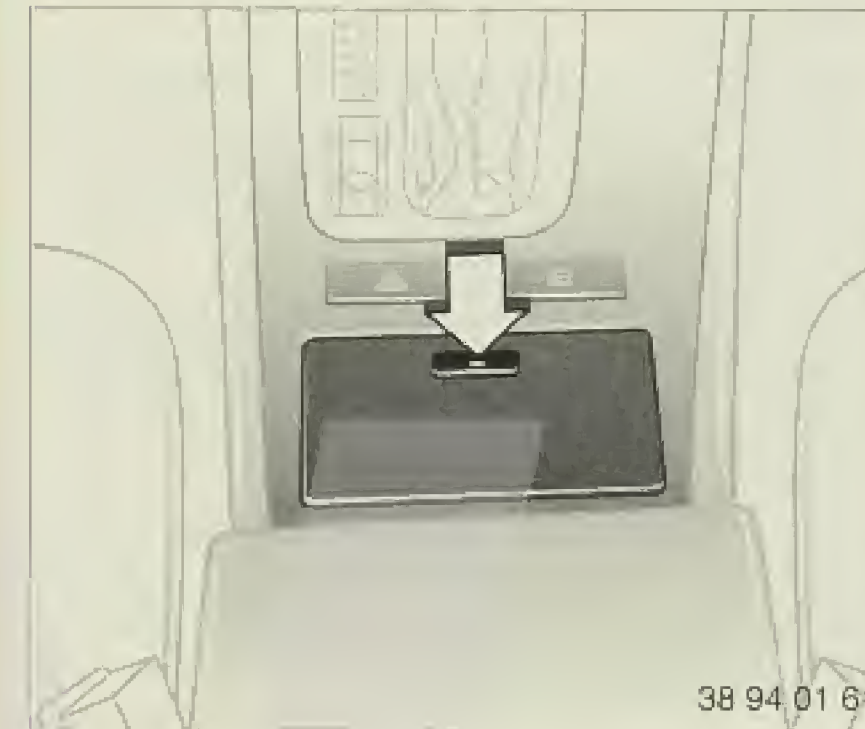
There is a rotating coin holder\* on the right beneath the radio flap; on cars with the non-smoker package\* it is also available instead of the front ashtray.

There are further storage compartments in all doors and on the front seat backs.

### Drinks can holder\*

There are two holders for drinks cans in a compartment at the front of the centre console beneath the air conditioning controls and two holders at the rear end of the centre console, beneath the grilles.

To open, press the recessed area at the top; to close, swing the flap shut.

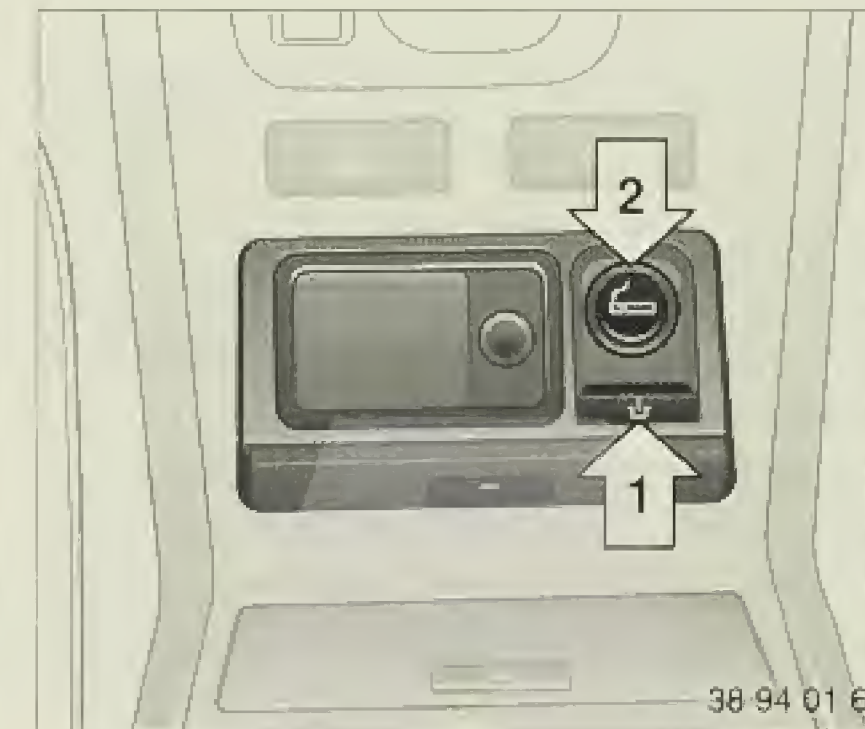


38 94 01 61

### Ashtray\*

**To open:** press down at the recessed area (arrow).

To extinguish a cigarette, knock off the ash and insert only a short distance into the funnel-shaped hole.



38 94 01 62

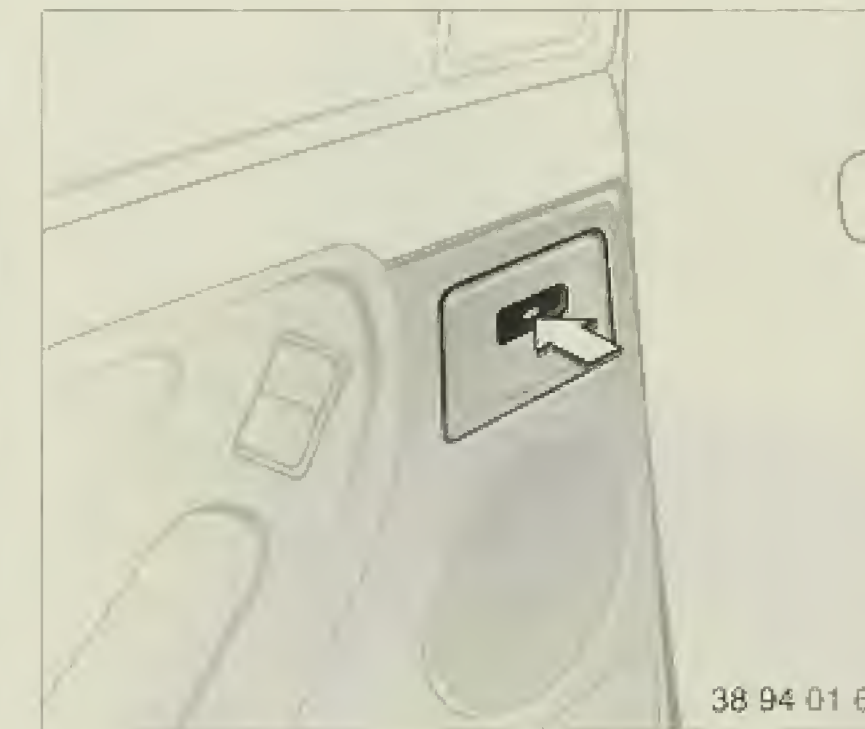
**To empty:** press button (arrow 1): the ashtray will pop up and can be removed.

### Cigarette lighter\*

Press in to operate (arrow 2). The cigarette lighter can be removed when it pops back out.

### Cigarette lighter socket

This can also be used to power a hand lamp, a car vacuum cleaner or similar items rated at not more than 12 Volts, app. 200 Watts. On cars with the non-smoker package\*, take off the protective cap. Make sure that the socket is not damaged by attempting to insert plugs of the wrong pattern.



38 94 01 63

### Rear ashtray

**To open:** press down at the recessed area at the top.

**To empty:** pull out the insert.

### Cigarette lighter for rear passengers

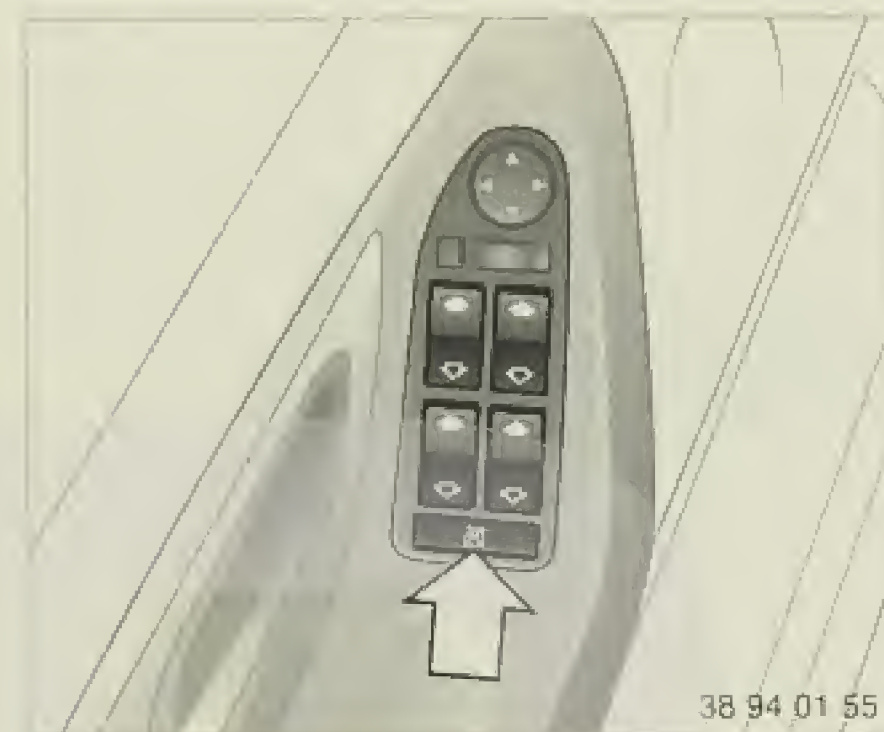
At the end of the centre console.

### Warning:

**The cigarette lighter remains operational when the ignition key has been removed. For this reason too, children should never be left in the car unattended.**







38 94 01 55

### Electric windows

These can be operated in ignition key position 1 and beyond.

- Press the rocker switch in until the pressure point is felt:  
The window will continue moving until the rocker switch is released.
- Press the rocker switch in briefly beyond the pressure point (one-touch function):  
The window opens or shuts automatically.  
In this case, window movement is halted by touching the switch again briefly.

There are separate rocker switches beneath the windows on the front passenger's side and at the rear.

#### Safety switch (arrow)

This can be used to prevent operation of the rear windows from the rear switches, e.g. by children.

#### Warning:

**If children are carried on the rear seat it is particularly important to keep the safety switch pressed in.**

**Always remove the ignition key and take it with you when leaving the car.**

**After the ignition has been turned off,** the window switches can still be operated

- in ignition key position 1 or 0 and when the key has been removed, or
- **after** the front doors have been opened for the first time (for a maximum of 15 minutes), or until they are opened for the first time (depending on national-market version).

#### Convenient operation of the windows by way of the door lock:

**Opening:** when the door is closed, turn the key in the door lock to the "release" position and hold it there.

**Closing:** when the door is closed, turn the key to the "locking" position and hold it there.

Release the key to halt the movement.

**For convenient operation of windows by means of the remote control, see Page 23.**

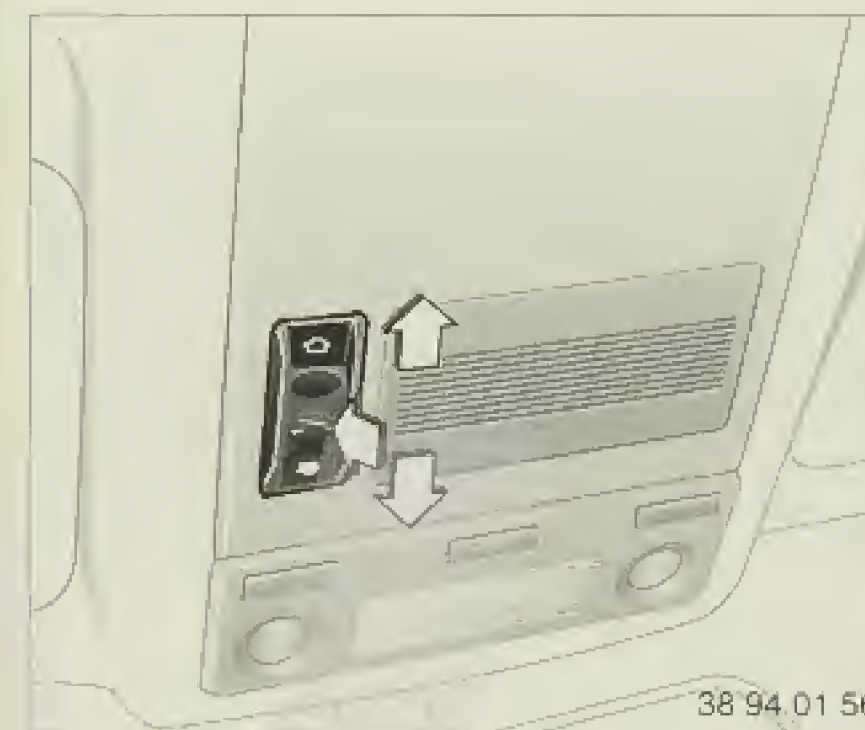
#### Warning:

**Careless or unsupervised closure of the windows, particularly with the remote control, could cause injury.**

#### Protective function

If the contact strip at the top edge of the window frame is pressed while a window is being closed, the glass will come to a halt and then re-open slightly.

This protective function can be put out of action (for instance if tampered with by unauthorized persons) by holding down the one-touch function.



38 94 01 56

### Sliding/tilt roof\*

Can be operated in ignition key position 1 and beyond.

**To raise:** press the switch.

**To open:** slide the switch to the rear as far as the pressure point.

**To close:** slide the switch forwards as far as the pressure point.

#### Note:

When raised, the roof lining moves back only a few centimetres.

#### One-touch function\*

Sunroof opens or closes automatically if the switch is moved once in the desired direction beyond the pressure point. Movement is stopped by touching the switch again. The one-touch function cannot be used to raise the roof from the closed position.

When the roof is open, operation of the one-touch function in the raising direction will move the roof to its raised limit position.

When the roof is in the raised position, operation of the one-touch function in the opening direction will move the roof to its open limit position.

Here again, repeated use of the one-touch function interrupts movement.

**After the ignition has been switched off,** the electric windows can still be operated

- in ignition key position 1 or 0 and when the key has been removed, or
- **after** the front doors have been opened for the first time (for a maximum of 15 minutes), or until they are opened for the first time (depending on national-market version).

#### Convenient operation of the sliding/tilt roof by way of the door lock:

**Opening:** when the door is closed, turn the key in the door lock to the "release" position and hold it there.

**Closing:** when the door is closed, turn the key to the "locking" position and hold it there.

Release the key to halt the movement.

**For convenient operation of sliding/tilt roof by means of the remote control, see Page 23.**

#### Note:

To prevent low air pressure or draughts inside the car when the sliding/tilt roof is slid back, and in particular when it is tilted up, keep the ventilation system's air outlets open and boost the airflow through them if necessary.

#### Warning:

**Careless or unsupervised closure of the sliding/tilt roof, particularly with the remote control, could cause injury.**

**Always take the ignition key with you when you leave the car.**

#### Protective function

If the roof panel encounters an obstruction after it has closed about halfway, it will come to a halt and re-open slightly.

This protective function can be overridden (e.g. if the roof is stiff as a result of frost or as a result of interference by unauthorized persons) by holding the switch in the one-touch position.

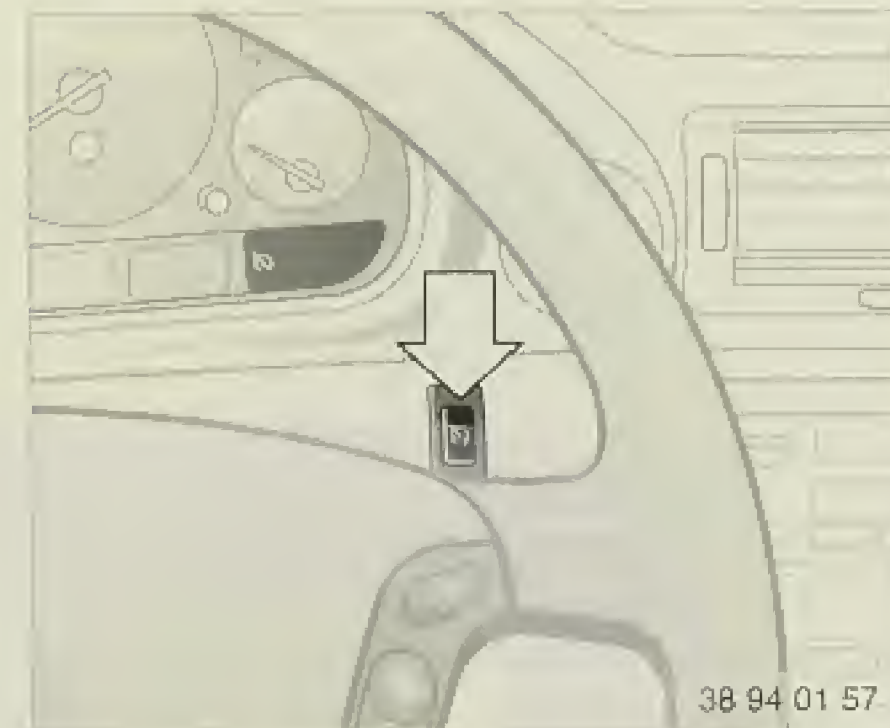
#### Note:

After an interruption to the power supply (for example if the battery is disconnected), the roof can only be raised. Bring the sliding/tilt roof to the fully raised position and hold the switch in the limit position for about one second.

If an electrical defect occurs, the sliding/tilt roof can be operated manually. See Page 107.







### Automatic cruise control \*

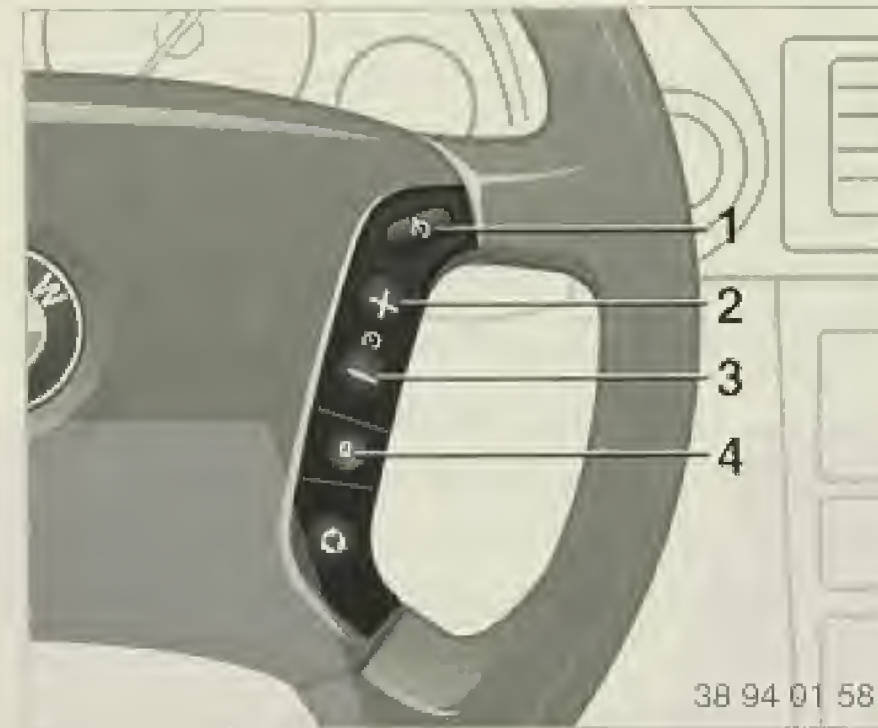
Any desired road speed above approx. 30 km/h can be memorized and maintained automatically.

**Switching on the system** – in ignition position 1 and beyond:

Press switch (arrow); the telltale in the instrument cluster comes on.

Press switch again to deactivate the system.

The system is switched off and the memorized speed value lost when the engine is switched off.



### 1 Activate

#### Pressing the switch:

The speed last memorized is recalled and maintained once it has been reached again.

### 2 Accelerate

#### Pressing the switch briefly:

The car's actual speed is maintained and memorized. Each time the switch is operated briefly again, road speed is increased by app. 1 km/h.

#### Holding the switch in this position:

The car accelerates without the accelerator pedal being touched. When the lever is released, the speed then reached is maintained and memorized.

### 3 Decelerate

#### Pressing the switch briefly:

Each time the switch is operated briefly again, road speed is reduced by app. 1 km/h provided it was previously travelling at a controlled speed.

#### Holding the switch in this position:

The car decelerates by automatic restriction of the throttle, provided it was previously travelling at a controlled speed. When the switch is released, the speed then reached is maintained and memorized.

### 4 Off

#### Pressing the switch:

The cruise control facility is switched off immediately.

The cruise control is also switched off automatically:

- If the car exceeds the selected speed by app. 16 km/h for more than 30 seconds.
- If the brakes or clutch are operated or if the automatic transmission selector lever is moved from D to N.

#### Warning:

**Do not use the cruise control on twisting roads, if traffic is heavy or in any other situation which makes it too difficult to maintain a constant speed, nor when the road could be slippery (snow, rain or ice) or on a loose surface (stone chippings or sand).**



### Electrically operated roller sun blind for rear window \*

Touch the rocker switch momentarily to actuate.

### Roller sun blinds for rear side windows \*

Pull the blind out at its loop and secure it to the retainer.



### Rear centre armrest

Pull out at the loop when required.

To open the storage compartment, lift the catch (arrow).

### Front armrest \*

Press the front button for forward/back adjustment.

To open a storage compartment, press the button at the side.

### Rear footrests \*

The footrests can be detached as desired and positioned as required in the footwell.





## Ski bag\*

This enables 3 to a maximum of 4 pairs of skis to be carried safely and without being exposed to dirt.

Together with the available length inside the car's luggage compartment, skis up to 2.10 m long can be carried in the ski bag. Note, however, that when several pairs of skis are inserted the tapered section of the bag reduces the overall carrying capacity, so that only 2 pairs of 2.10 m long skis can be carried.



### Inserting items into ski bag

Fold down the centre armrest, detach the trim at the upper burr fastener and place it on the armrest.

### Lowering the centre armrest

Lift up the armrest slightly at the front and squeeze together the two levers (arrow): the armrest can now be lowered on to the seat surface.

### Warning:

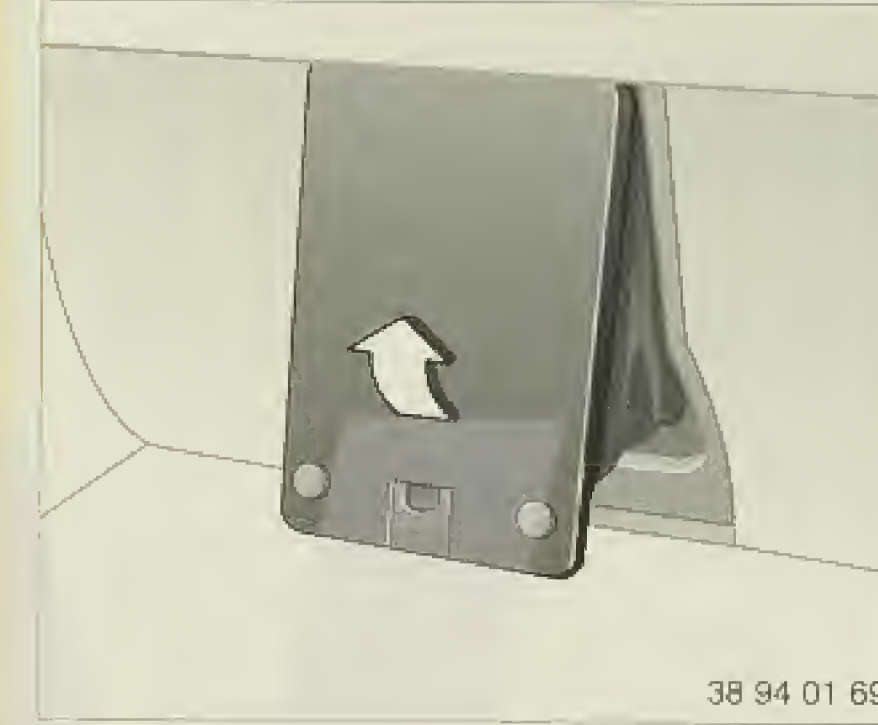
It is essential to fold down the centre armrest before loading the ski bag.



Press the button (arrow 1): this will release the loading flap in the luggage compartment.

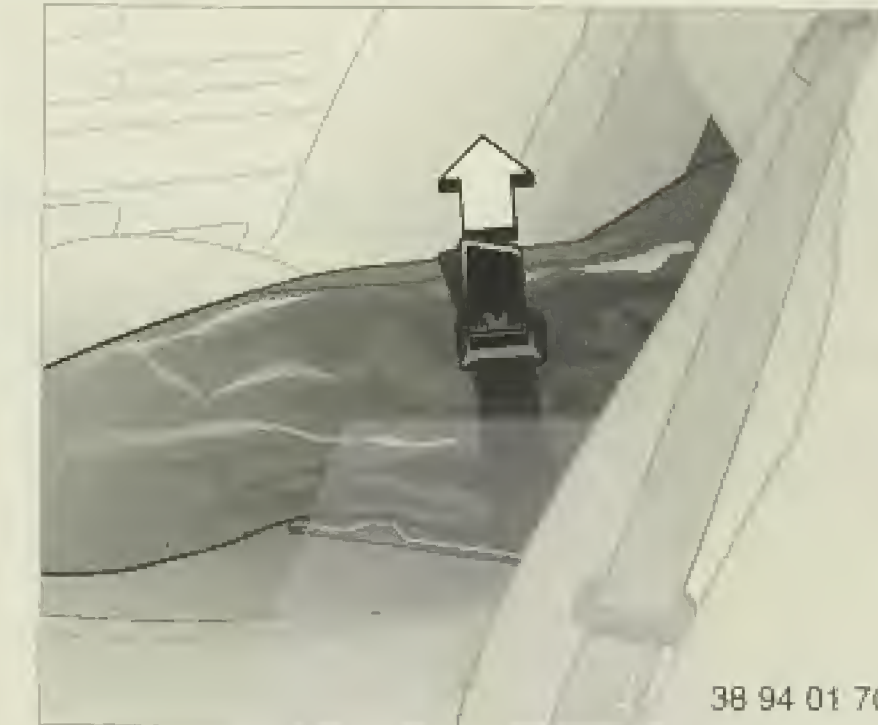
Squeeze together the lock levers (arrow 2) and fold down the cover forwards.

Lay out the ski bag between the front seats. It has a zip fastener for better access to the items inside, and for use when the bag needs to be dried out.



From the luggage compartment side, attach the cover flap to the underside of the rear-window shelf with the magnetic holders provided.

Make sure that the skis are clean before they are inserted into the sack, and that any sharp edges on them or their bindings do not damage or pierce the ski bag.



### Note:

Secure the skis or any other stored objects with the retaining strap on the ski bag. Tighten the turnbuckle to ensure that the retaining strap is taut.

To store away the ski bag, follow the opposite procedure. The centre armrest automatically returns to its original position when folded up.

If the ski bag is not to be used for a considerable time, it must be dry before it is rolled up and stowed away.

As the ski bag is waterproof, you are recommended to remove melted snow and ice or moisture condensate from it during use, and dry it out.





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## Driving hints

## Engine

Do not warm the engine up at idle speed.

The only exception is if the outside temperature is extremely low, in which case the engine may be run for about half a minute at a fast idle speed to ensure that all points in the lubrication system are supplied with oil.

Never run a cold engine at high speeds, as this will have an adverse effect on operating life.

When the load on the engine is high (acceleration, hill-climbing), try to use engine speeds above 1500/min and shift down to a lower gear in good time, particularly on gradients.

After a fairly long section of a journey spent at low speeds (heavy town traffic, nose-to-tail traffic), try to cover a few kilometres at engine speeds above 3000/min. This will help to eliminate soot deposits in the engine.

## Clutch

When declutching, press the pedal down fully. Do not rest your foot on the pedal in normal driving.

## Warning:

**You should never rest your foot on the brake pedal either when the car is being driven. Even slight continuous pressure on the brake pedal could cause overheating, brake pad wear or even brake system failure.**

## Aquaplaning:

**When driving on a wet road or one covered in slush, a wedge of water tends to form between the tyre and the road. This situation, known as aquaplaning, means that the tyre can actually lose contact completely with the road surface, so that the car can neither be steered nor braked properly. You should therefore always reduce speed on a wet road.**

## Rear-window shelf:

**Never place hard or heavy objects on the shelf below the rear window, or they could be dislodged when the car is braked heavily and endanger the occupants.**

## Coat hooks:

**If clothing is attached to these hooks, make sure it does not obstruct the driver's view. Do not hang heavy objects from them, to avoid the risk of personal injury if the car is braked suddenly.**

## Cars with catalytic converter

The catalytic converter reduces pollutant emissions in the exhaust.

Cars equipped in this way must **always be run on unleaded fuel only.**

Even small amounts of lead in the fuel can permanently damage the oxygen sensor and the catalytic converter.

To ensure that the **engine always operates correctly and reliably**, and to avoid damaging it, the following instructions should be complied with:

- Always have the specified maintenance work carried out at the stated intervals.
- Do not run the fuel tank dry.
- Switch off the engine at once if misfiring occurs.
- Never tow-start the car unless the engine is cold, or else unburned fuel may reach the catalytic converter. It is always preferable to use jumper leads from another car or a separate battery to start the car.
- Avoid any other situations in which unburned or only partially burned fuel could pass through the engine, for example:  
Frequent operation of the starter for very short periods or repeated attempts to start if the engine does not fire. (However, switching off an engine which is running normally and restarting it again shortly afterwards is perfectly acceptable.)  
Running the engine with a spark plug lead detached.

If unburned fuel reaches the catalytic converter as a result of misfiring or fuel-air mixture preparation malfunctions, overheating and damage may result.

## Warning:

**High temperatures build up at the catalytic converter (as on all cars with this form of exhaust emission control). Make sure that no easily combustible material (for example hay, leaves, grass etc.) comes into contact with the hot exhaust system when the car is driving, idling or parked. If this material were to ignite and cause a fire, very severe injuries or damage could result.**

**Do not remove the heat shields from the exhaust system, or apply under-seal to them.**

Engine refinement is influenced by the exhaust emissions purification technology, fuel consumption and the quality of the fuel used. The modified operating conditions are largely taken into account by the electronic measuring and control functions and the high-quality design and workmanship of individual components, e.g. in individual features such as the electronic ignition and fuel injection system.

Any unusual responses on the part of the engine or the car, for instance when accelerating at a low engine speed, as combustion sets in again following fuel cutoff while coasting or at low running speeds are all part of the compromise between the need for low fuel consumption, improved environmental acceptability and luxury driving and do not call for any adjustment or remedial action.

If the Digital Motor Electronics engine management system, which normally ensures that all engine operating settings are optimized, is separated from the power supply (for instance if the battery is disconnected), the engine may not idle smoothly for a short period after the system has been re-energized. Stable idling is obtained only after the engine has passed through various adaptive phases at its normal operating temperature, as part of the regular driving routine.





### Car radio operation

For adjustments to your car radio and correct operation of its controls, please refer to the accompanying operating manual.

The radio's reception and reproduction quality depend on the car's position in relation to the transmitter and on the height and direction of the aerial.

Certain concessions are unavoidable in the case of a car radio. The car's position is constantly changing and a directional aerial cannot therefore be used. Interference from high-tension overhead wires, vehicles with poor interference suppression on their electrical systems, but also buildings and natural obstructions to the radio signal from the transmitter can all create noise and cause signal deterioration which cannot be entirely eliminated at the receiving end.

**Climatic influences** such as fog, rain or snow can also affect radio reception.

As the **sun's activity** increases, reception quality on the long, medium and short waves is adversely affected. Reception is best on these wavebands after dark, when the radio signals from the transmitter are reflected back to earth more powerfully by the ionosphere.

The MW, LW and SW wavebands can be heard a long way from the transmitter, because the signals spread out both as **ground waves** and **through the air** – reflected by the ionosphere.

For reasons associated with the laws of physics, reception on the **medium waveband** is not of such high quality as very high frequency (VHF) reception using the FM principle. Since medium-wave transmitters can be picked up a long distance away, particularly at night, a wide variety of listening material is always available, but interference between closely-spaced transmitters is a frequent problem.

Unlike VHF reception, audio reproduction on medium wave may seem rather lacking in treble to the listener.

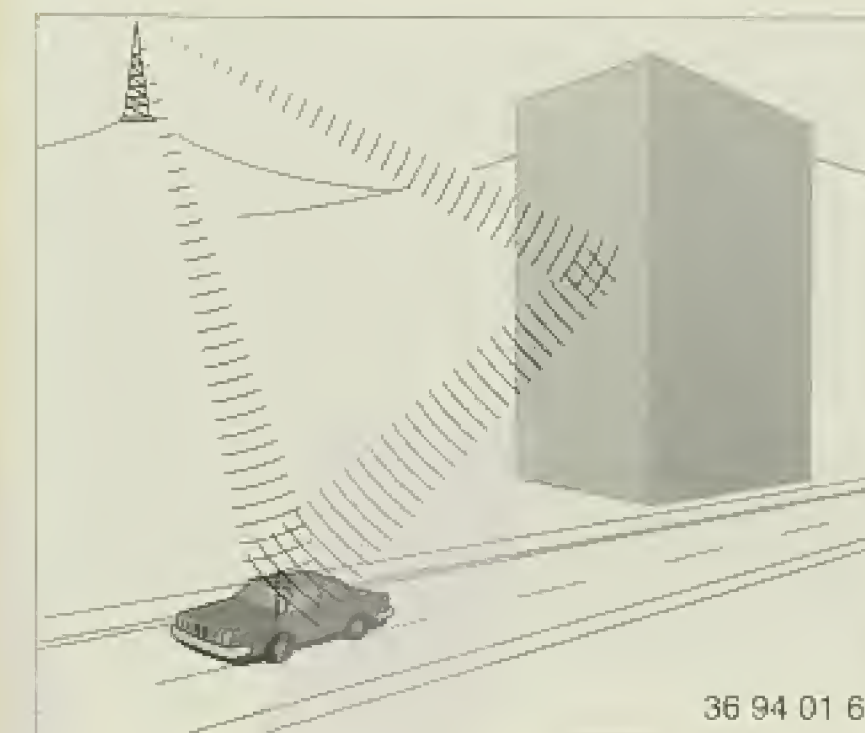
The range at which **long wave transmitters** can be picked up is even greater than that of medium wave transmitters.

The **short wave band** has the most extensive range of all. Most transmitters and – subject to physical limitations – the best quality of reproduction can be obtained in the 49-metre band.

**VHF (FM) reception** provides far higher listening quality than any of the AM wavebands. However, relatively few transmitters can normally be picked up satisfactorily at any one time, since the signals travel only by **line of sight** and their range is limited to about 100 kilometres. As the distance from the transmitter increases, disturbance in the form of noise becomes more severe, or the transmitter may fade completely or be displaced by a more powerful one as the car approaches it. When deterioration of this kind sets in, switch to another frequency.

**Stereo reception** is only possible on VHF. As the car moves away from the transmitter, interference tends to occur. In this case, choose another station with a stronger signal which is broadcasting in stereo.

Where a radio station is being broadcast on several frequencies, sets with the Radio Data System (RDS) automatically select whichever frequency offers the best reception if the RDS function is active.



**Noises best described as hissing, splashing or flutter** are heard if reflections, for instance from roadside buildings, cause the car radio to pick up the same signals twice within a fraction of a second. Signal volume also fluctuates rapidly.

The Aerial Diversity System (multi-aerial system) includes a processor which evaluates the signals being received and utilizes only the most powerful ones. This helps significantly reduce the level of interference.

D-network telephones not recommended by BMW can also cause interference if the limit of their capacity is reached when passing between cells. This interference takes the form of a low-pitched humming in the loudspeaker system.



**Continuous hiss** usually occurs when the limit of a transmitter's range is exceeded, or in a large shadow where direct reception is poor. The only permanent cure is to retune to a stronger signal.

**Fading** – a particular problem on medium wave (MW) – occurs when the ground and airborne radio waves are superimposed at the receiver. It is usually accompanied by distortion.

**Flutter** is heard when the direct line between transmitter and receiver is obstructed by large buildings or natural obstacles. A regular pattern of flutter is sometimes heard when driving down a road lined with large trees.

### Car telephone\*

If a car telephone is retrofitted, it is recommended to fit a second battery of suitable capacity with isolating relay in accordance with BMW guidelines, to assure an adequate power supply.

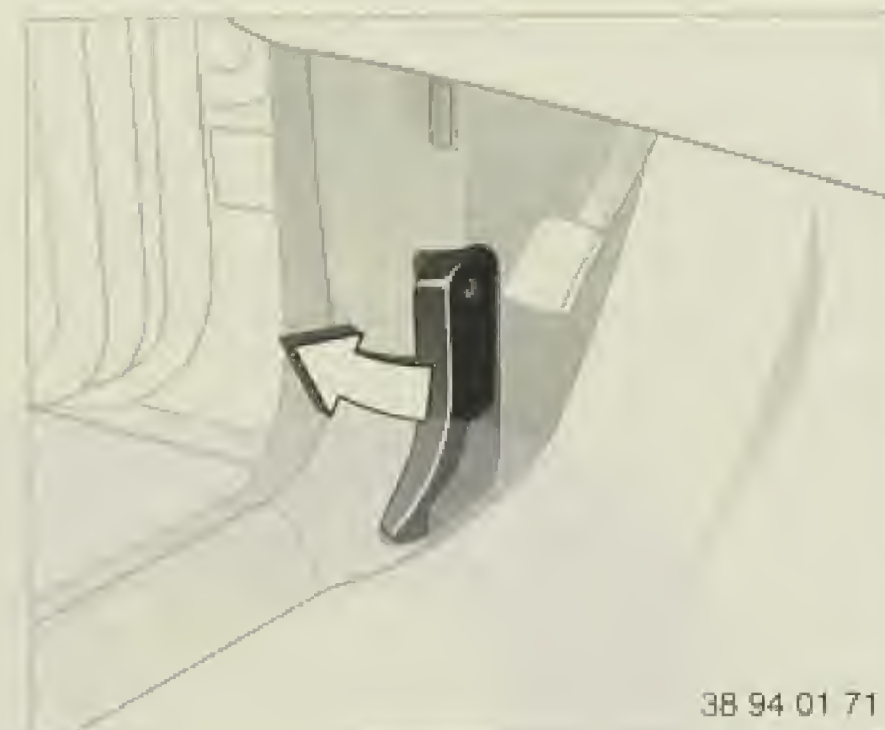
#### Note:

Mobile communication systems (car telephones, two-way radio etc.) can cause interference if they are not approved for use in your car. Since BMW cannot examine and test each product, it is unable to accept any responsibility for the installation of items it has not approved. Before purchasing any such equipment you are recommended to consult a BMW service station.

Furthermore, in order to safeguard your BMW's operating reliability, do not operate any in-car telephones or other mobile radio equipment with an aerial **inside** the car, or not fitted to the car's exterior.







38 94 01 71

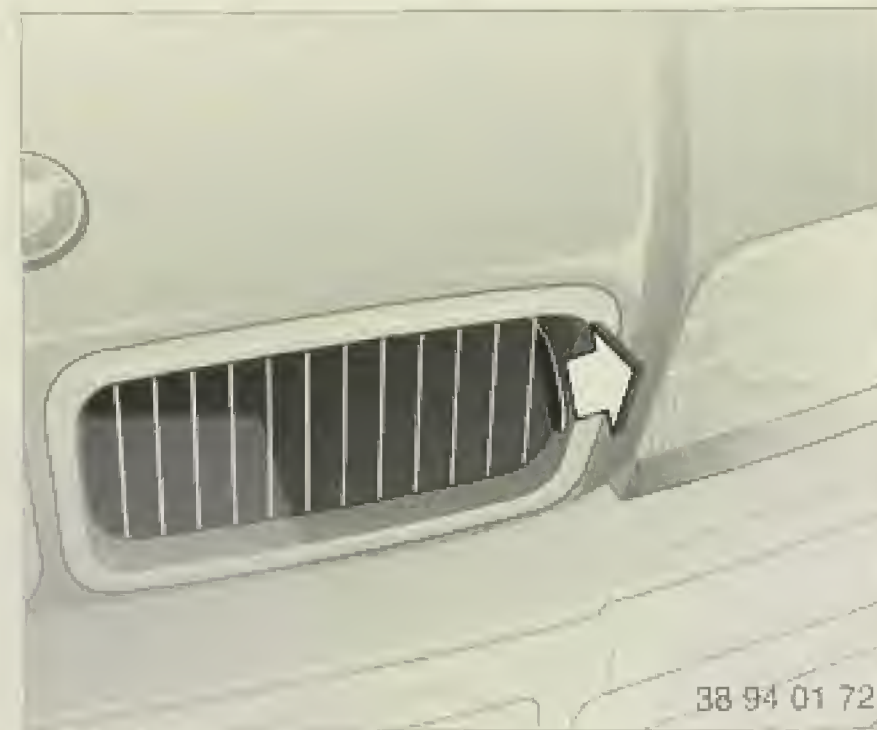
### Engine compartment lid

**Releasing:** pull the lever on the left under the fascia.

#### Warning:

Switch off the engine and allow it to cool down before undertaking any work inside the engine compartment. Always disconnect the battery before any work is commenced on the electrical system, particularly inside the engine compartment.

Careless handling of parts or materials when working on the car represents a personal safety hazard. Please study and comply with the relevant instructions and recommendations in all cases. If you are not familiar with the regulations which could be applicable in a specific situation, you are recommended to entrust the work to a BMW service station.



38 94 01 72

**To open:** pull the release lever and open the lid.

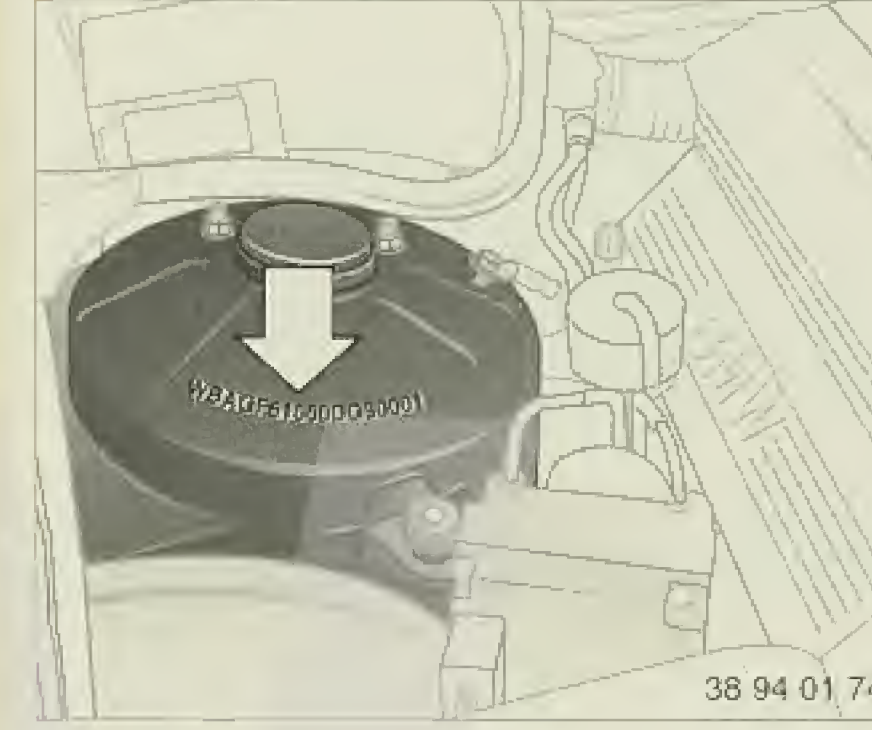


38 94 01 73

**To close:** press the lid down evenly on both sides until the catches are heard to engage.

#### Warning:

Should you notice while driving the car that the engine compartment lid is not properly secured, stop at once and close it correctly.



38 94 01 74

### Vehicle identification number

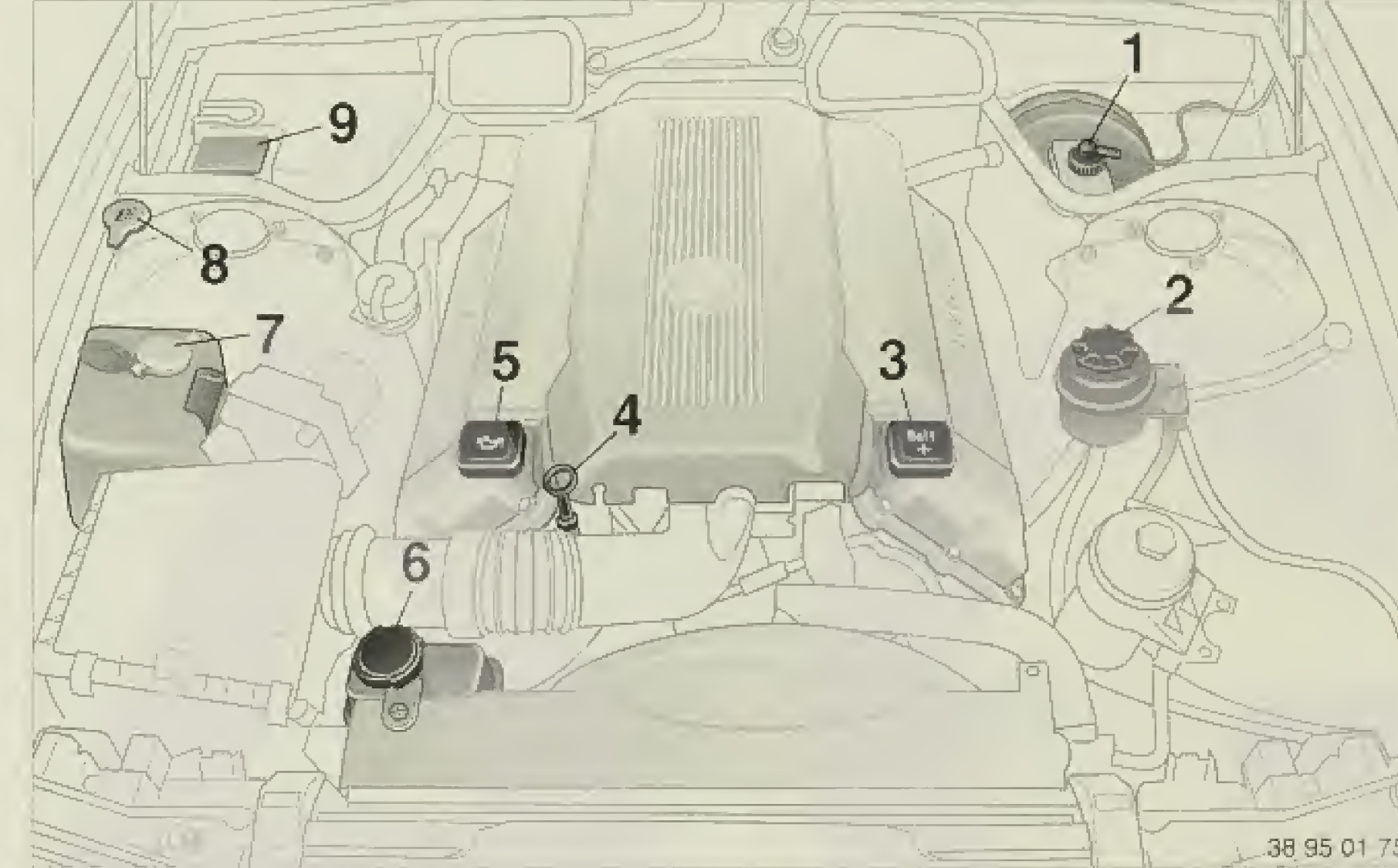
This is located in the engine compartment on the right-hand spring-strut dome (arrow).

### Type plate

In the engine compartment, on the right side panel next to the intake air cleaner, or possibly on the left-hand side of the fascia at the top.

The details shown on the type plate, and the vehicle identification number, must correspond with those in the car's documents.

The car's data are needed as a reference for all queries, checks and spare part orders.



38 95 01 75

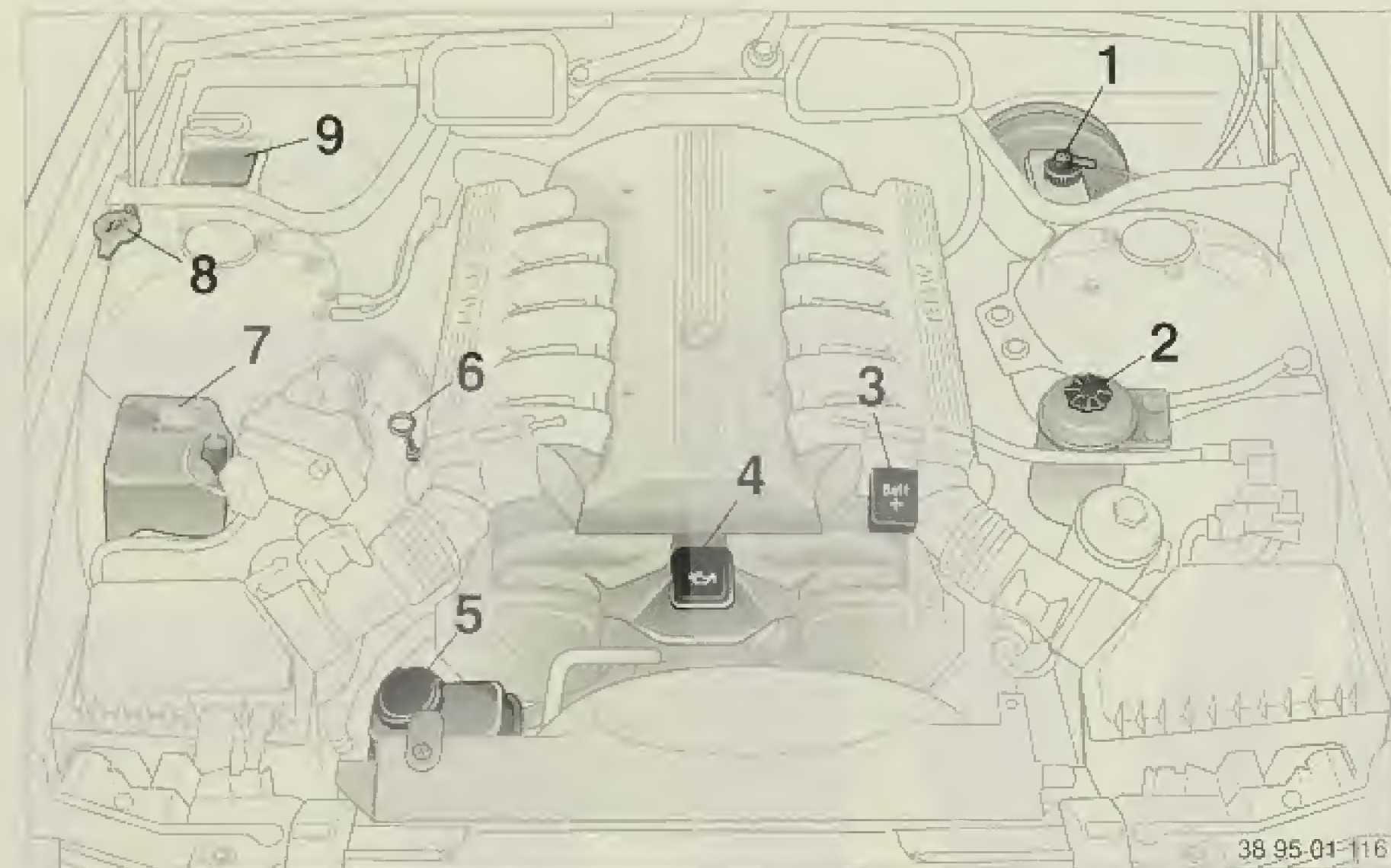
### Engine compartment – BMW 730i/iL, 740i/iL

- 1 Brake fluid reservoir
- 2 Oil reservoir for power steering and self-levelling suspension hydraulics
- 3 Positive pole connection (for starting with a flat battery)
- 4 Engine oil dipstick
- 5 Engine oil filler cap

- 6 Coolant level equalizing tank
- 7 Reservoir for intensive cleaning system
- 8 Reservoir for headlight and fog light cleaning system
- 9 Fuse box

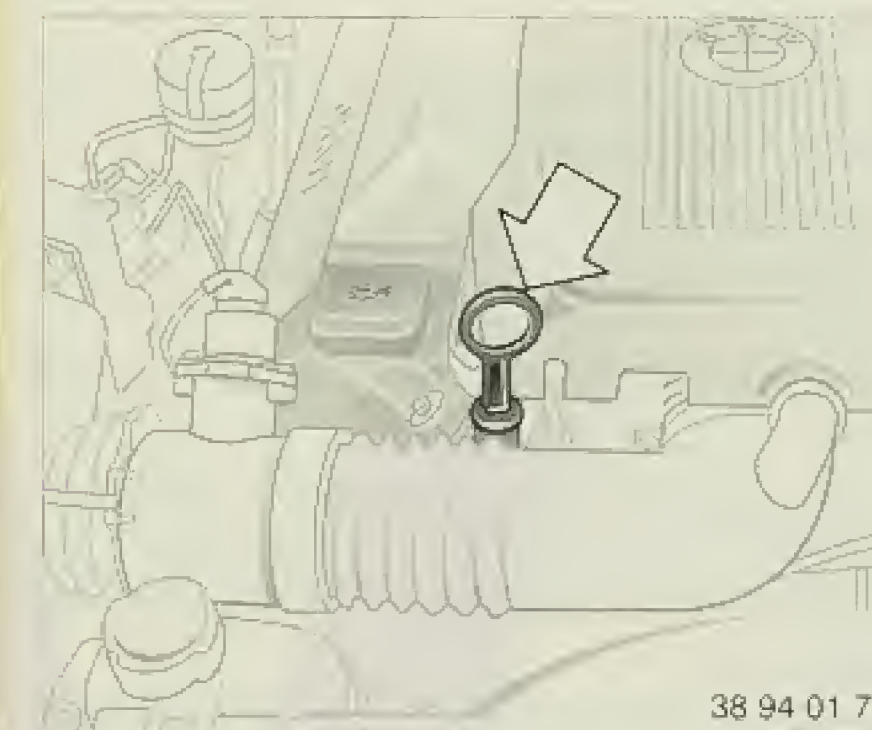






## Engine compartment – BMW 750i/L

- |   |   |
|---|---|
| 1 Brake fluid reservoir   | 6 Engine oil dipstick                                     |
| 2 Oil reservoir for power steering and self-levelling suspension hydraulics | 7 Reservoir for intensive cleaning system                 |
| 3 Positive pole connection (for starting with a flat battery)               | 8 Reservoir for headlight and wind-screen cleaning system |
| 4 Engine oil filler cap   | 9 Fuse box  |
| 5 Coolant level equalizing tank   |   |



## Engine oil

### Checking engine oil level

Like fuel consumption, engine oil consumption depends on driving style and operating conditions.

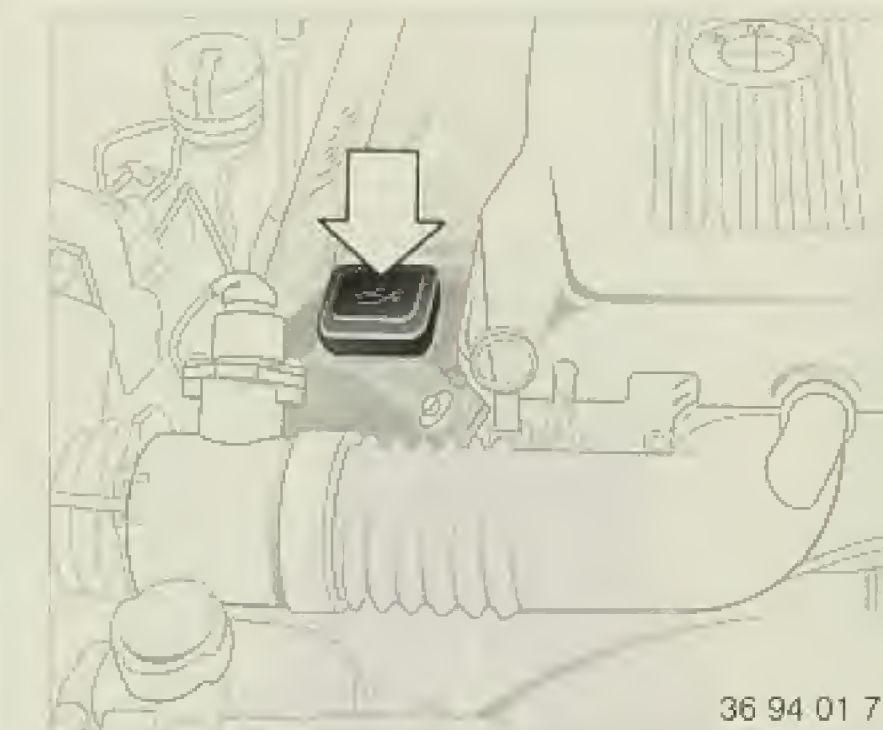
The oil level should therefore be checked regularly, approximately every 1000 km (approx. 600 miles), or sooner if the engine has been driven hard. The car should stand on a flat, level surface.

Maximum measuring accuracy:

Before a cold engine is started.

If the engine is already at its normal operating temperature, wait a short time so that the oil can drain back into the sump (for instance while refuelling).

Push the dipstick fully down into its tube. The oil level must be between the two marks on the dipstick.

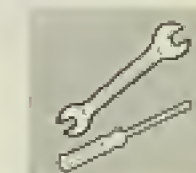


### Adding engine oil

Do not add oil until the level has fallen almost to the lower mark on the dipstick. **However, do not allow the oil level to fall below the minimum level mark.**

The space between the two dipstick marks represents approx. 1 litre of oil. **Never add oil beyond the upper dipstick mark.** Adding too much oil will harm the engine because it will be burned off more rapidly, thereby implying incorrectly that the engine's oil consumption was too high.

BMW engines are designed not to need separate additives in the engine oil, and indeed adding these substances could even be harmful in certain circumstances. The same applies to the manual gearbox or automatic transmission, the final drive and the power steering.





## Engine oil specifications

The grades of engine oil to be used are exclusively governed by the CCMC or API specification.

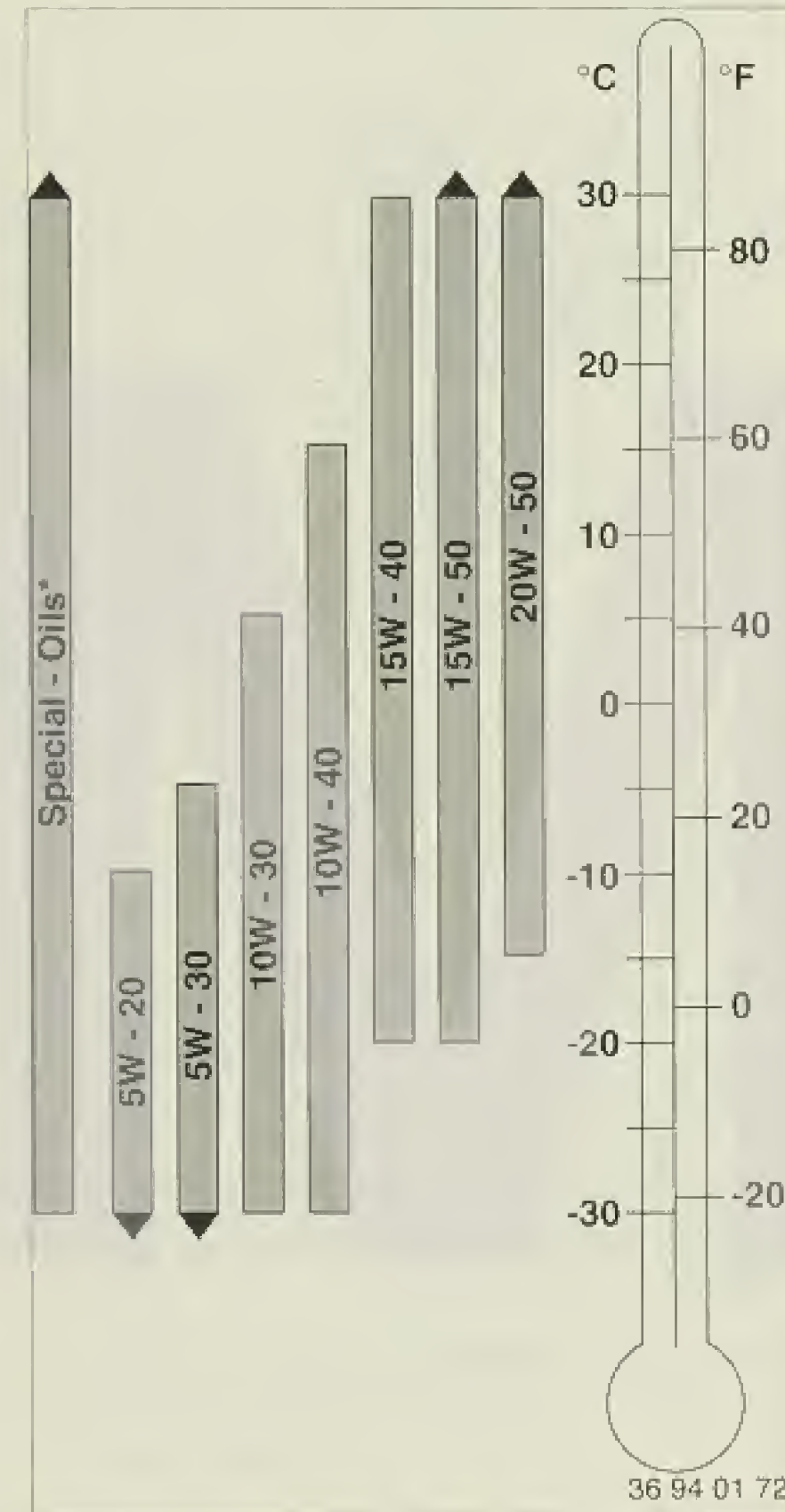
Required quality stages:

Preferred:	Also permitted
CCMC-G4 CCMC-G5 <sup>1)</sup>	API SG API SH
CCMC-G4/PD2 CCMC-G5/PD2 <sup>1)</sup>	API SG/CD API SG/CE
	API SH/CD API SH/CE

<sup>1)</sup> If engine oils to CCMC-G5 or CCMC-G5/PD2 specification are to be used, BMW Service should be consulted regarding their suitability for use all the year round.

When disposing of used oil, please comply with environmental protection laws.

**Recommendation:** always have oil changes performed by the BMW service station.



\* Engine oils to CCMC-G5 or CCMC-G5/PD2 specification, individually approved by BMW

## Viscosities

(The oil's liquid density, as shown by the SAE classification)

The choice of SAE grade depends on the average air temperature at the time of year.

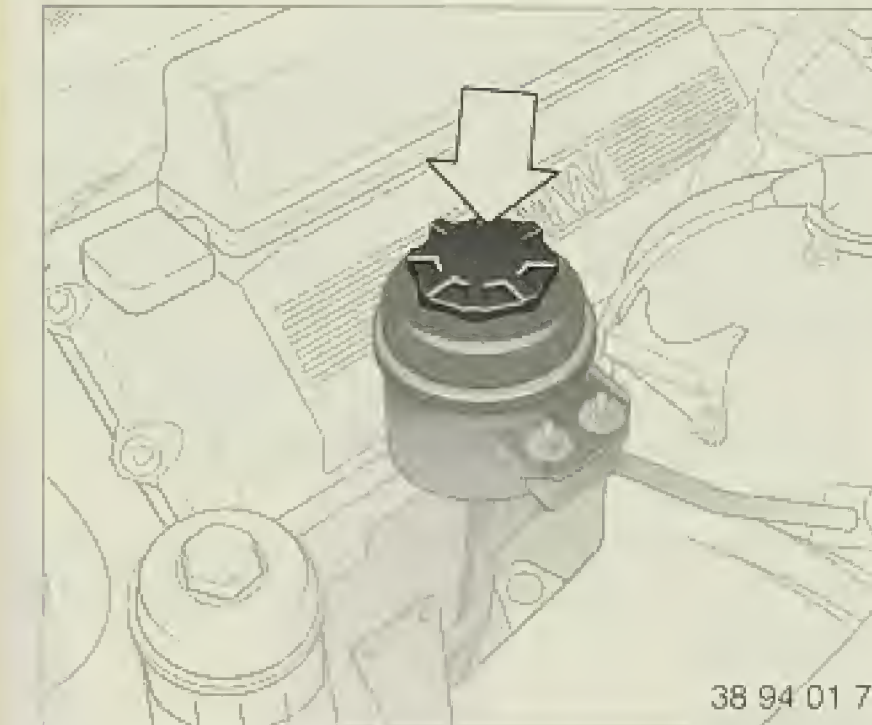
The correct SAE grade is shown in the chart.

Note that the temperature limits indicated for the various SAE grades can be departed from for brief operating periods.

## Warning:

**In laboratory tests, prolonged contact with used oils has caused cancer.**

For this reason, always wash the affected skin areas thoroughly with soap and water after work. Keep oils, greases etc. out of children's reach and in vessels marked with a suitable warning.



## Oil for steering hydraulics

With the **engine at a standstill**, unscrew the reservoir cap and fit it again.

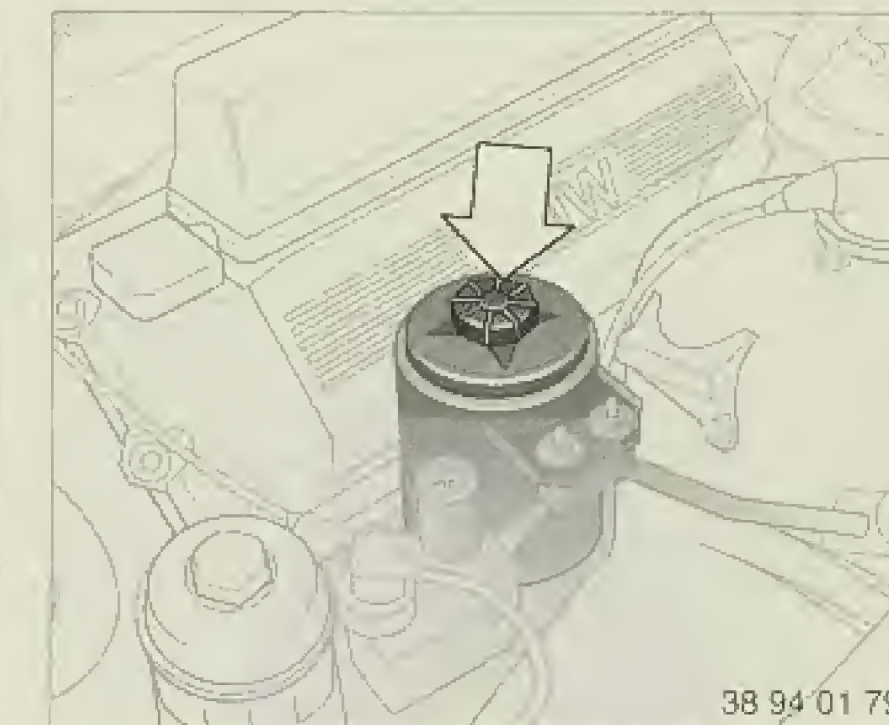
The oil level must be between the two marks on the dipstick.

Top up with ATF if necessary. BMW service stations know the approved grades.

**Allow the engine to run for a while.** Top up the oil if necessary until the level is between the two marks.

Switch off the engine. The oil level may rise approx. 5 mm (0.2 in) above the upper mark.

Screw the reservoir cap on tight.



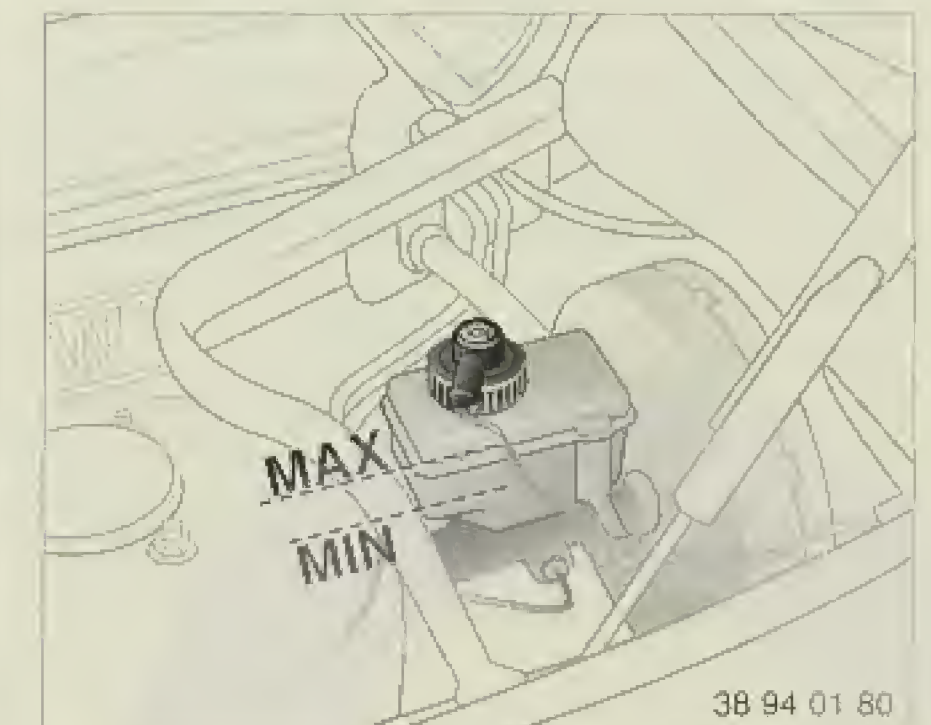
## Oil for power steering and self-levelling suspension\*

With the **engine at a standstill**, unscrew the knurled nut and take off the reservoir cover.

The oil level must rise slightly above the base of the strainer (approx. 5 mm or 0.2 in) with the car unladen.

Add fresh oil if necessary. Always use Pentosin CHF 11S or, if not available, CHF 7.1 or LHM. If the vehicle is carrying a load, add 0.25 l Pentosin CHF 11S but stop adding if the oil level reaches the base of the strainer. Check the oil level again with the car unladen.

Fit the reservoir cap and tighten the knurled nut. Ensure that the cap is properly fitted.



## Brake fluid

If warning light for brake hydraulics comes on and the message "**CHECK BRAKE FLUID**" appears in the Check Control:

Brake fluid has been lost from the system, causing pedal travel to increase. Fill to the upper (MAX) mark. The level can be seen from the outside.

BMW service stations are familiar with the factory-approved brake fluids (DOT 4).

## Warning:

**Brake fluid is hygroscopic, that is to say it absorbs moisture gradually from the air. To ensure that the brake system remains fully operational, the brake fluid must be renewed every 2 years by a BMW service station. See also Pages 13, 98 and 134 and the Service Booklet.**



Brake fluid is toxic and attacks the car's paintwork. Keep it in sealed original packs, out of reach of children. When disposing of brake fluid, comply with environmental protection laws.

**Warning:**  
Do not spill brake fluid. Add it only up to the MAX mark on the reservoir. If brake fluid comes into contact with hot parts of the engine, it can ignite and cause serious burns.



### Coolant

Coolant level with engine **cold** (app. 20 °C):

Unscrew the equalizing tank cap.

The coolant level is correct if the top end of the red float rod is on a level with the top edge of the tank mouth (see arrow in illustration, or sketch on equalizing tank).

The coolant consists of water to which a long-life antifreeze and corrosion inhibitor has been added. The 50:50 mixing ratio must be maintained all the year round to ensure protection against corrosion. No other additives are needed.

**Renew the coolant every 3 years.**

### Adding coolant to system:

Open the cap on the equalizing tank **only when the engine has cooled down**. The pointer of the coolant thermometer on the instrument panel must be in the blue zone, or else there will be a **risk of scalding**.

- Turn the cap anti-clockwise slightly until the excess pressure can escape, then remove it.
- If the level is too low, slowly add coolant up to the correct level. **Do not overfill.**

### Warning:

**Never add coolant when the engine is hot.**

**To avoid the risk of possible subsequent damage, use only factory-approved long-life antifreezes and corrosion inhibitors containing no nitrites or amino compounds. Every BMW service station is familiar with these products.**

**Antifreezes and corrosion inhibitors are toxic. Store them only in the original packs, out of reach of children.**

**Observe environmental protection legislation when disposing of such substances.**

### Warning:

**Long-life antifreeze and corrosion inhibitor contains the flammable component ethylene glycol. Take care not to spill long-life antifreeze and corrosion inhibitor on hot parts of the engine, otherwise it can ignite and cause serious burns.**



### Liquid for washer systems

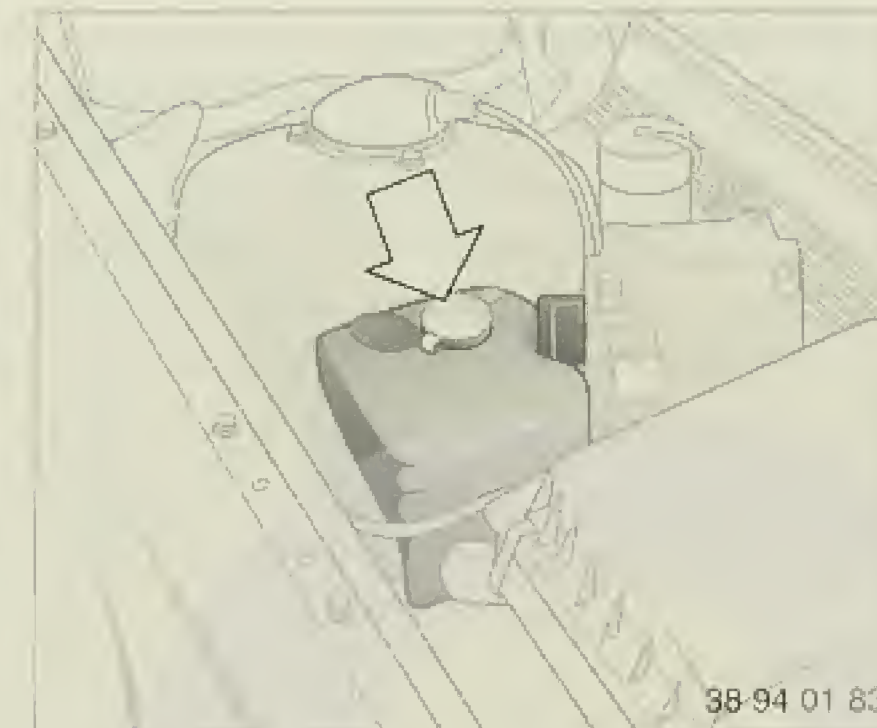
**Headlight\*** and windscreen cleaning system

Capacity of windscreen cleaning system app. 4.5 litres (7.9 pints), or app. 6.0 l (10.5 pints) in conjunction with the headlight cleaning system.

Fill with water and add antifreeze if required (comply with the manufacturer's instructions).

### Note:

It is advisable to mix the washer fluid before adding to the systems.



### Intensive cleaning system\*

Capacity app. 1.0 litre (1.8 pints).

Fill with intensive cleanser (for frost protection down to app. 27 °C, available from BMW dealers).





**Windscreen washer jets**

The jets of liquid should strike the windscreen in such a way that reliable cleaning is assured even at high speeds.

Correct the jet position if necessary by inserting a suitable implement (e.g. a needle) and moving the jet as required.

**Headlight cleaning system jets**

Have these jets adjusted by a BMW service station if necessary.

**Power steering**

If the steering is stiff to turn:  
Check oil level, see Page 93.

If steering is stiff when the steering wheel is moved rapidly:

Always have the system checked by a BMW service station.

**Applicable to Servotronic only\***

If steering becomes lighter as speed increases:

There is a malfunction in the electronic control system.

**Warning:**

**If the power assistance should fail, greater effort will be required at the steering wheel.**

**Brake system****Failure of one brake circuit**

Brake pedal travel increases and higher pedal pressure is needed.

The car can still be braked effectively with the intact brake circuit.

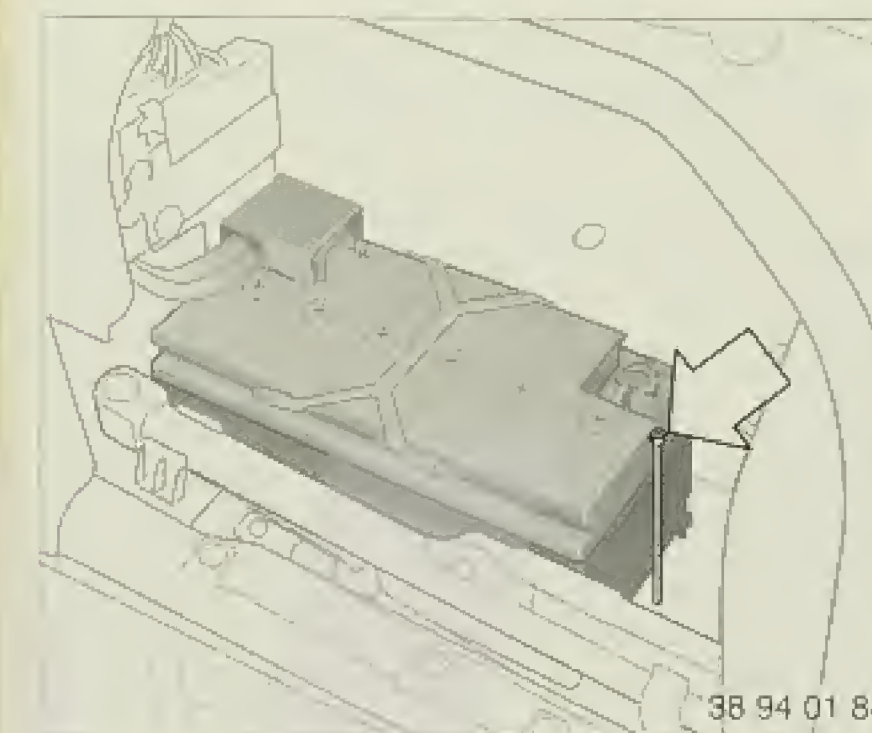
However, you should take the car to a BMW service station without any delay if a brake system malfunction occurs.

If the Check Control displays "**CHECK BRAKE LININGS**":

The brake pads are worn. Have them renewed without delay.

**Warning:**

**Use only brake pads approved by BMW, or else the car's operating permit will be invalidated.**

**Battery**

The battery is located in the luggage compartment behind the right-hand side trim (reach into the handle at the top of the trim and fold down for access). There is a positive terminal in the engine compartment to which a jumper lead can be connected if necessary (see Page 102).

The battery is maintenance-free to German DIN 43 539/2 standard, that is to say its acid content normally lasts for the lifetime of the battery.

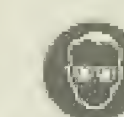
If the acid level drops too low, for instance if the car is used for lengthy periods in a hot climate, top up with distilled water (not acid).

Acid level: up to the "MAX" mark on the outside of the battery in each cell (app. 5 mm above the tops of the plates in the cells).

Keep the top of the battery clean and dry.



Please read the following notes before performing any work on the battery:



Always wear eye protection. Particles containing acid or lead must never be allowed to come

into contact with the eyes, skin or clothing.



Battery acid is highly caustic. Always wear protective gloves and goggles. Do not tilt the battery, otherwise acid could leak out through the gas vents.



Keep the acid and battery out of the reach of children.



Never bring a naked flame near the battery or cause sparks in its vicinity. Do not smoke when handling the battery. Avoid creating sparks when handling leads and electrical equipment. Avoid short-circuits. Never short-circuit the battery terminals, as the resulting arc could cause severe injury.



A highly explosive detonating gas is generated when the battery is charged.



If acid comes into contact with the eyes, rinse immediately with clean water for several minutes

and consult a physician without delay. Neutralize acid spillage on the skin or clothes immediately with soap and rinse off with plenty of water. If acid has been swallowed, consult a physician immediately.



In order to protect the housing against ultraviolet radiation, do not expose the battery to direct daylight. As batteries which have run flat could freeze, store in a place where there is no risk of frost damage.

Never detach the battery leads when the engine is running, or else an overvoltage will occur and damage the car's electronic equipment beyond repair.

Disconnect the negative terminal first, then the positive terminal. Release the battery screw connection.

When installing again, make sure that the battery is properly secured. Connect the positive terminal first, followed by the negative terminal.

Only recharge the battery when the engine is at a standstill if still fitted to the car. It is easiest to recharge the battery by way of the positive terminal and earth (ground) point in the engine compartment. Starting with a flat battery: see Page 102.

Before attempting any work on the car's electrical system, always disconnect the negative lead from the battery to avoid the risk of short-circuits.





If the car is not used for more than four weeks, the battery's negative terminal should be disconnected from the on-board power supply.

If the car is not used for more than six weeks, remove the battery, recharge it and store it in a cool place where there is no risk of frost damage. Recharge the battery after 3 months at the latest, as it will otherwise be rendered useless. Every time the battery runs flat, particularly if left in this state for any length of time, its operating life is reduced.



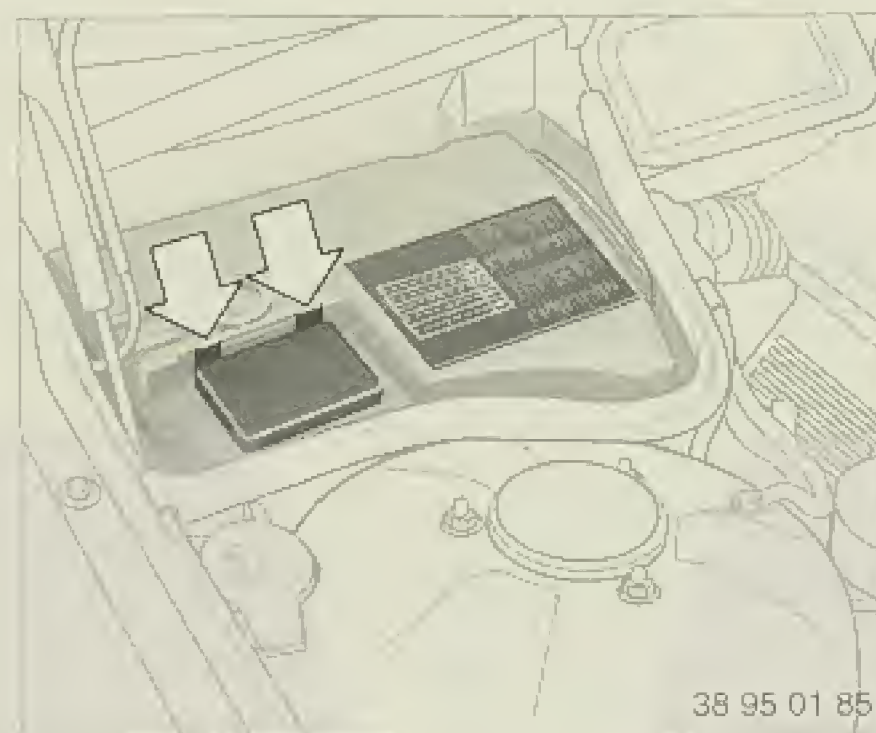
Return spent batteries to a collection point for used batteries or to your BMW service station.

Batteries filled with acid should be transported and stored upright. Protect batteries against falling over when in transit.

#### Note:

When indicating the next change of brake fluid, the Service Indicator does not take into account periods during which the battery has been disconnected.

Any such times must be taken into account to ensure that the brake fluid is changed according to schedule every two years, i.e. it will be necessary to change the brake fluid before the clock symbol lights up.



### Fuses

If an electrical consumer fails, switch it off and check its fuse.

The **fuse box** (electrical distribution box), with spare fuses, relays and plastic pincers, is on the right inside the engine compartment.

- Press the tabs on the cover forwards (arrow) and open the cover.
- Remove the fuse for the faulty consumer using the plastic pincers (located inside the cover).

– A blown fuse can be recognized by its melted metal wire. Replace it by a new fuse with the same rating in Amps.

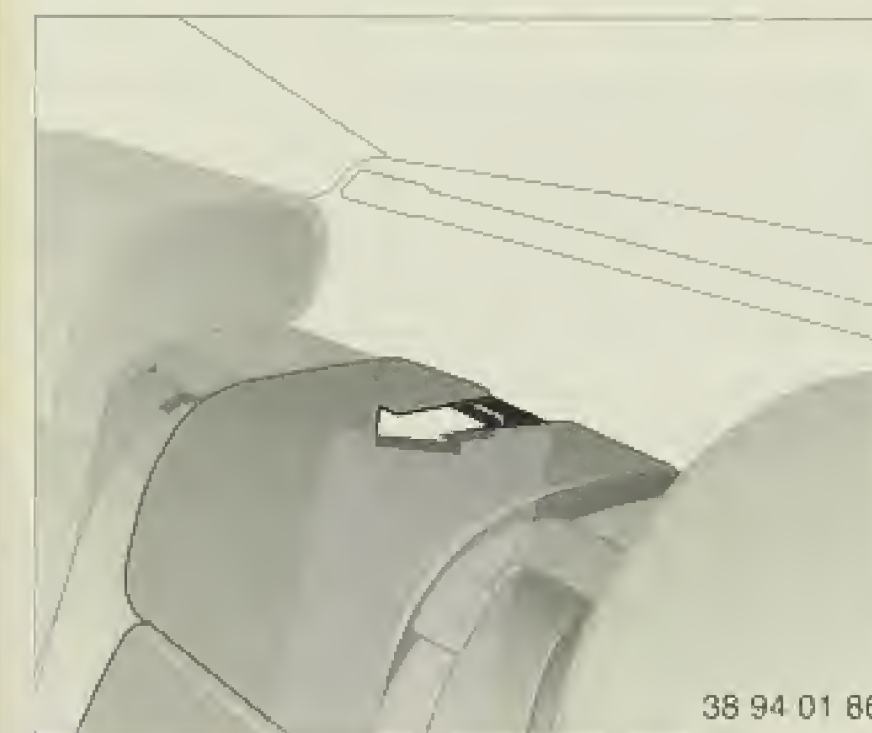
A list of fuses with ratings in Amps and details of the electrical consumers supplied is given next to the fuse box.

When closing the fuse box, make sure that the cover is properly in place.

There are more fuses behind the right side trim in the luggage compartment. On cars with a trailer tow hitch\*, there are additional fuses for the trailer lights in the trailer module in the luggage compartment, behind the left side trim. The fuse for the permanently positive line is located above the battery, in a separate fuse box, and should be renewed by a BMW service station in the event of a fault.

**Always renew blown fuses; never attempt to repair them with unsuitable materials.**

If a fuse blows several times in succession, ask the BMW service station to trace and rectify the fault.



### First-aid box \*

Between the back seats. Pull the handle (arrow) and swing the cover forwards.

**Comply with legal requirements concerning the need to carry a first-aid kit in the car.**

### Toolkit

Under the luggage compartment lid, accessible after unscrewing the wing bolt.

### Warning triangle \*

Space is provided in the toolkit to accommodate the warning triangle in an accessible position.

**Please note that in certain countries you are required by law to carry a warning triangle in the car.**

### Fire extinguisher \*

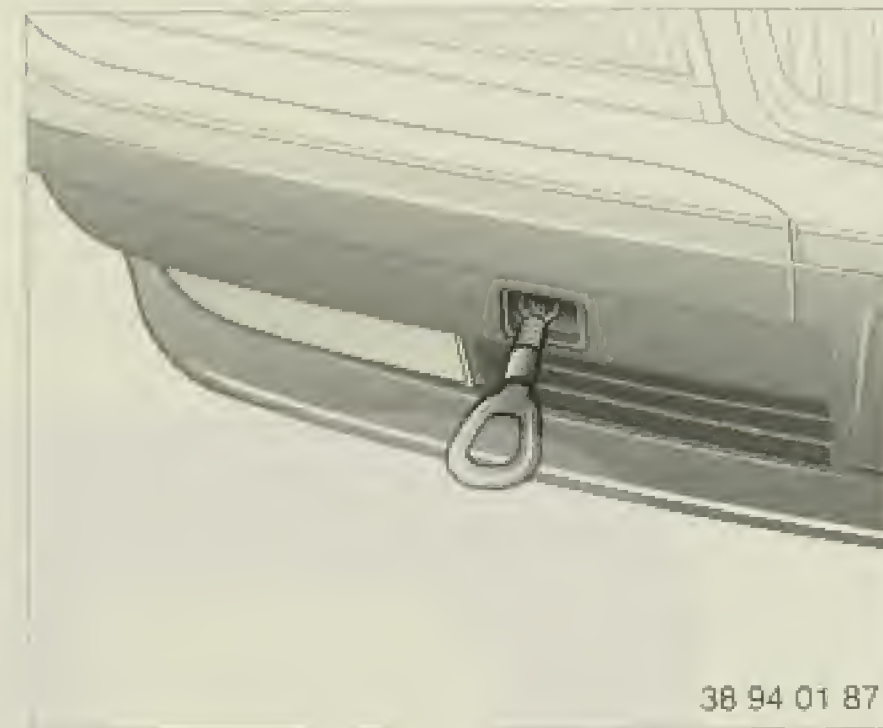
There is a holder\* on the driver's or front passenger's seat.

To ensure full operational reliability, have the fire extinguisher examined by a service station authorized by the manufacturer every 2 years.

If these service stations are not listed on the extinguisher or in any documentation available to you, please consult a local trade directory or the "yellow pages" of the telephone service to obtain the address.







### Towing eyes

The screw-in towing eye is kept in the toolkit and must always be carried. It can be attached at the front or rear of the car as required.

#### Access to threaded hole for towing eye

##### Front:

Press the arrow symbol on the cover and swing it out to remove.



##### Rear:

Same procedure as for front cover.

##### Warning:

**Always screw the towing eye in fully.**

For towing, either a rigid towbar or a nylon rope or tape should be used (the latter have the advantage of being resilient, so that peak loads are avoided).

Using a towbar:

The towing eyes of both vehicles should be on the same side.

If the towbar has to run at an angle, note the following:

- Clearance may be restricted when turning corners.

- If the towbar runs at an angle, lateral forces will be generated (these may be critical on a slippery surface).
- To compensate for towbar angularity, the two vehicles cannot always be driven one directly behind the other.
- If the towing vehicle's brakes are applied, the other vehicle may overrun it or skid sideways.

##### Warning:

**The towed vehicle should not be heavier than the towing vehicle.**

### Tow-starting

Cars with catalytic converter should only be tow-started if the engine is cold. The use of battery jumper leads is preferable.

- Switch on the hazard warning flashers. (Comply with national regulations regarding their use.)

- Turn the ignition key to position 2.

- Select third gear.

- Keep the clutch pedal down. When the car is moving, gradually release the clutch pedal. When the engine has fired and is running, depress the clutch pedal again.

- Switch off the hazard warning flashers. Have the cause of the starting problem traced and rectified by a BMW service station.

#### Cars with automatic transmission

These cars cannot be tow-started.

For starting with a flat battery, see Page 102.

### Towing away

- Turn the ignition key to position 1 so that the brake lights, turn indicators, horn and wipers can be operated.

- Switch on the hazard warning flashers. (Comply with national regulations regarding their use.)

If the car's electrical system has failed, display a warning notice to the rear or place the warning triangle in the rear window.

##### Note:

Please make sure that the ignition key is turned to position 1 even if the electrical system has failed, to prevent the steering wheel from locking.

#### Cars with automatic transmission

- Move the selector lever to N.

Maximum towing speed: 70 km/h (43 mile/h).

Maximum towing distance: 150 km (93 mile/h).

##### Warning:

**When the engine is not running, there is no power assistance and the brake servo is out of action. The steering and brakes will require extra effort to operate.**





### Starting with a flat battery

Do not use spray products sold as an aid to starting.

If the car's own battery is flat, the engine can be started by using two jumper cables from another vehicle's battery.

#### Warning:

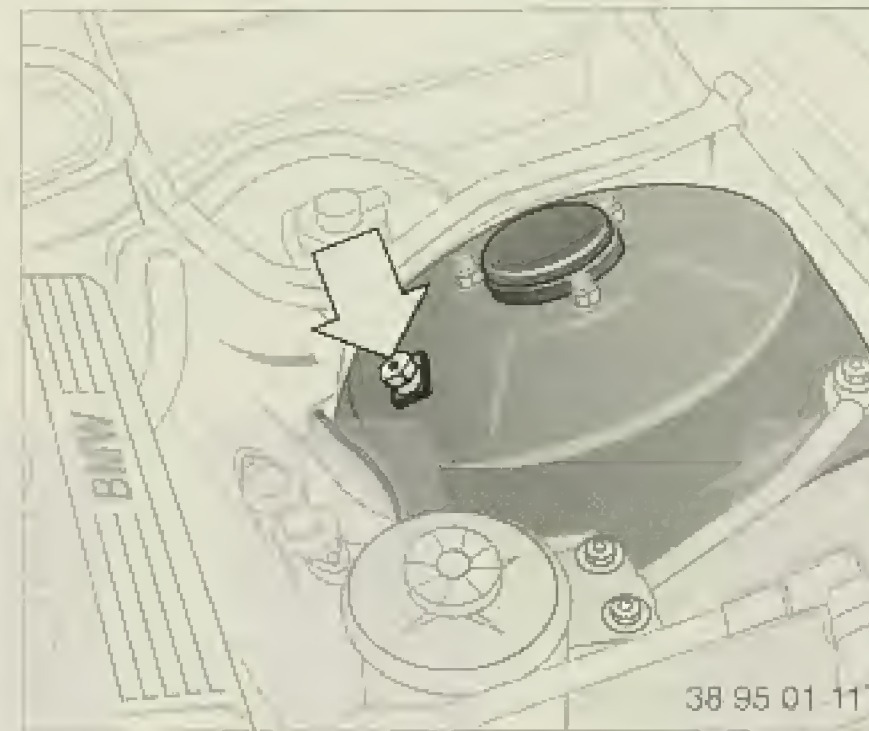
Touching any live components when the engine is running can result in a fatal electric shock.

Do not depart from the procedure described below, or else personal injury could result, or one or both vehicles be damaged.

1. Check that the other vehicle has a 12 Volt battery with approximately the same capacity (Amp/h). This should be printed on the battery.
2. Do not disconnect the flat battery from the car's electrical system.
3. The bodies of the two vehicles must not touch, or a short circuit could result.



4. First connect the positive terminal of the other car's battery with one of the jumper leads to the positive pole in the BMW's engine compartment (this has a protective cover marked "Batt. +" which can be removed by pulling the flap). Then connect up the batteries' negative terminals. First attach the jumper lead to the negative terminal of the other vehicle's battery or to the other car's engine or body earth (ground) and then to the engine or body earth of your own car (nuts on spring strut dome, identified on the BMW by arrow in illustration on right).



#### Warning:

When connecting up jumper leads, including when assisting other vehicles, please work in the sequence stated above so as to prevent sparks occurring at the battery.

5. If the second vehicle's battery is not well charged, run that vehicle's engine. Start your own car's engine in the usual way and leave it running. Before detaching the jumper leads from your BMW, switch on your car's lights, heated rear window and heater blower (at maximum speed) to ensure that the voltage reaching the consumers from the regulator is not too high. Then disconnect the jumper leads in the opposite order (negative pole first, then positive pole).

Have the battery recharged (depending on the cause of the fault).

#### Note:

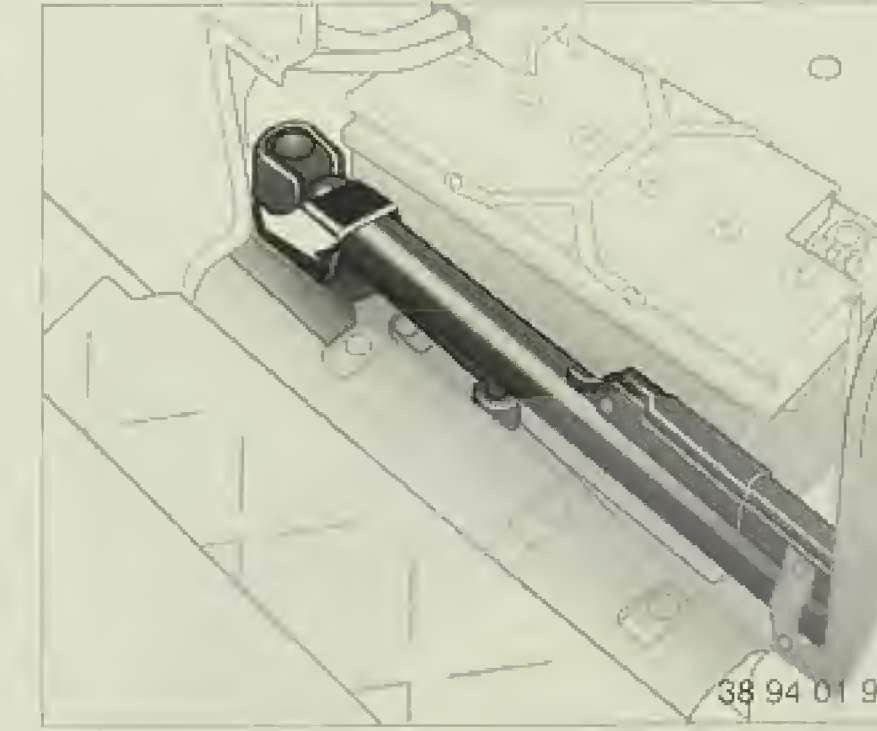
If the car was locked at the outset, as soon as the jump leads have been connected up it must be unlocked with the key or remote control in order to de-activate the immobilizer and the anti-theft alarm system.

### Changing a wheel

Depress the parking brake and select either 1st gear or reverse (manual gear-box) or automatic transmission position P.

If you suffer a puncture during a journey, protect the car by switching on the hazard warning flashers and if necessary setting up the warning triangle or a flashing warning light at a sufficient distance to the rear. Comply with national legislation in these respects.

To avoid rattling noises later, note how the various tools are attached to the car and replace them in precisely the same positions afterwards.



To change a wheel, you need:

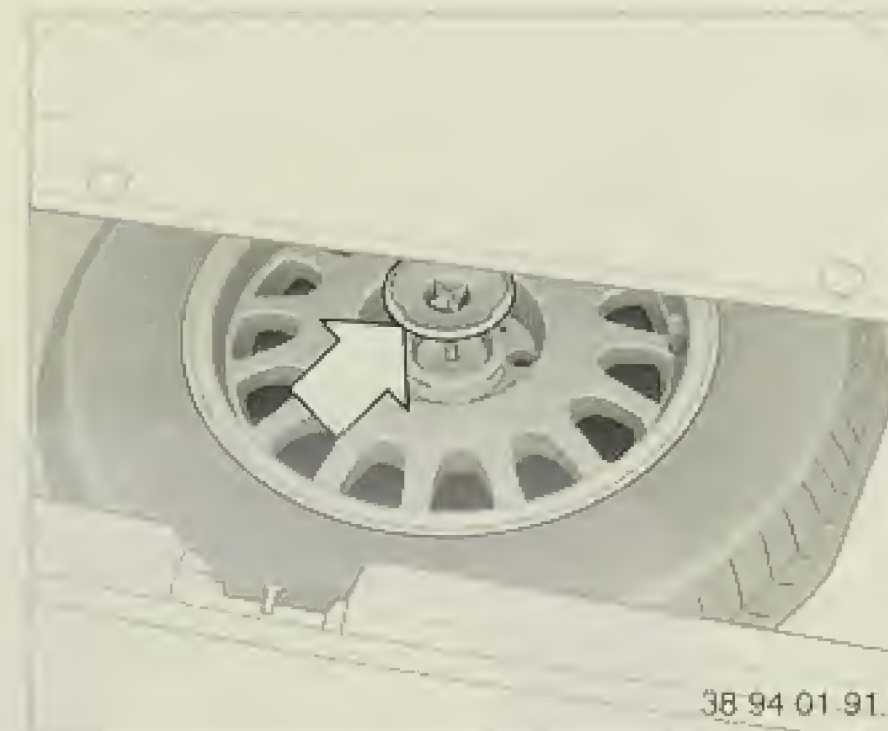
#### Jack

Pull down the right-hand trim in the luggage compartment with the handle at the top and release the clip (arrow).

After use, lower the jack fully, insert in the holder at the rear and press down the clip.







#### Spare wheel and adapter\* for wheel stud cover\*

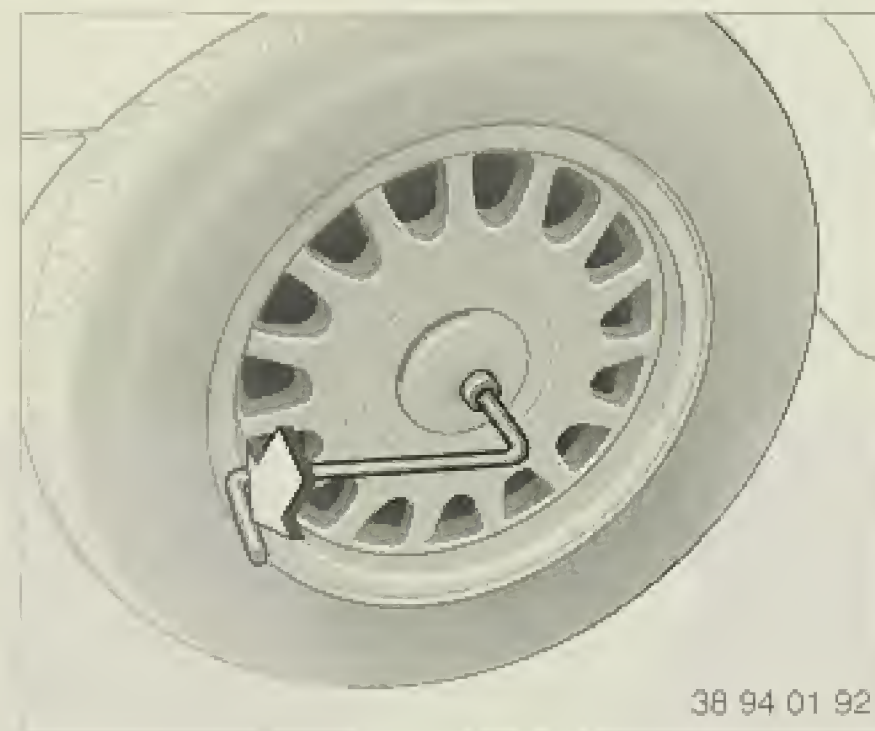
These are both under the mat in the luggage compartment. Take out the mat. Take off the adapter (arrow), unscrew the wing nut by hand and remove the wheel.

#### Note:

On wheels without wheel stud covers, a plastic support is provided instead of the adapter.

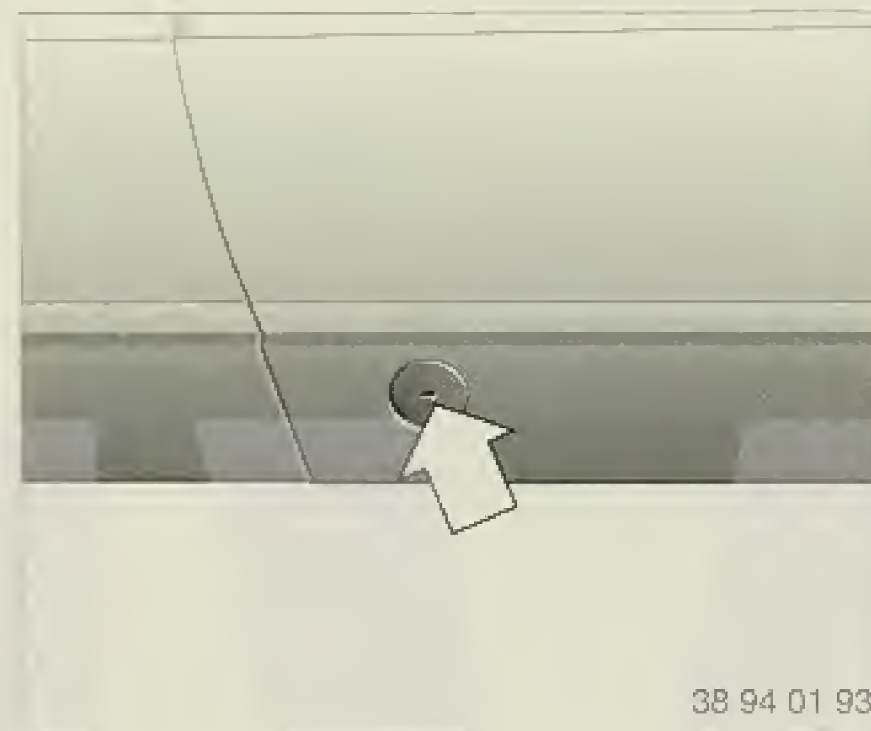
#### Wheel stud wrench, centering pin and screwdriver

In the toolkit underneath the luggage compartment lid.



#### Wheel changing procedure:

1. Fit the adapter for the wheel stud cover in position, apply the wheel stud wrench and turn to the left. For thiefproof wheel studs, see Page 106.
2. Slacken the wheel studs by half a turn.
3. Remove the appropriate cover for the jack attachment mounting by turning anticlockwise with the screwdriver.
4. Insert the jack fully into the socket and position it so that the base is resting firmly on the road. Make sure that the car is prevented from rolling away.



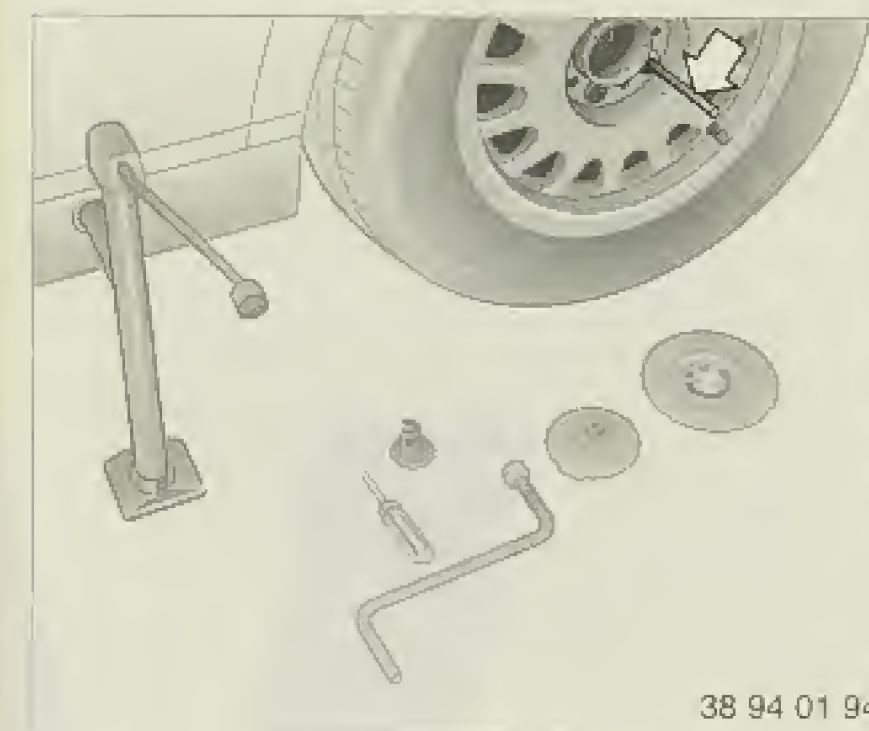
5. Raise the car's body with the jack until the wheel to be changed is clear of the road.

#### Warning:

**Use the jack only for wheel changing. Never attempt to lift another type of car or any other heavy object with it, as this could lead to accidents and personal injury.**

**Do not lie under a jacked-up car; a very severe or fatal injury could result.**

6. Take out the wheel studs and remove the wheel.



7. Insert the centering pin from the car's toolkit into one of the threaded holes, with the plastic cap in position on it.
8. Offer up the new wheel, insert at least two of the studs at opposite points and take out the centering pin.
9. Screw in the remaining wheel studs and tighten them all in a crosswise pattern.
10. Lower the car, remove the jack and screw in the cover cap for the jack attachment point with the screwdriver.
11. Tighten the wheel studs fully, working in a crosswise pattern.

#### Warning:

For safety reasons, the wheel studs should be checked with a calibrated torque wrench without delay to ensure that the specified tightening torque of 100 Nm (74 lb.ft.) has been reached. If a new wheel (for instance the spare wheel) is fitted for the first time, check the tightening torque again after the car has covered about 1000 km (about 600 miles).

12. Centre the wheel stud cover and attach. Push it on and turn to the left or right until wheel cap locks into place.

When replacing a wheel in the spare wheel well, make sure that the central threaded rod in the well is not bent or damaged.

If your car is equipped with wheels other than Original BMW light-alloy wheels, make sure that the correct wheel studs are used.

Have the flat or defective tyre repaired or replaced as soon as possible, and the new tyre balanced on the wheel.

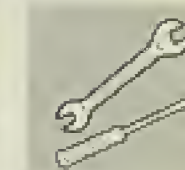
**Tyre repairs** should only be entrusted to a BMW service station or an authorized tyre dealer with the specialized training needed to identify the full extent of possible tyre damage.

#### Important:

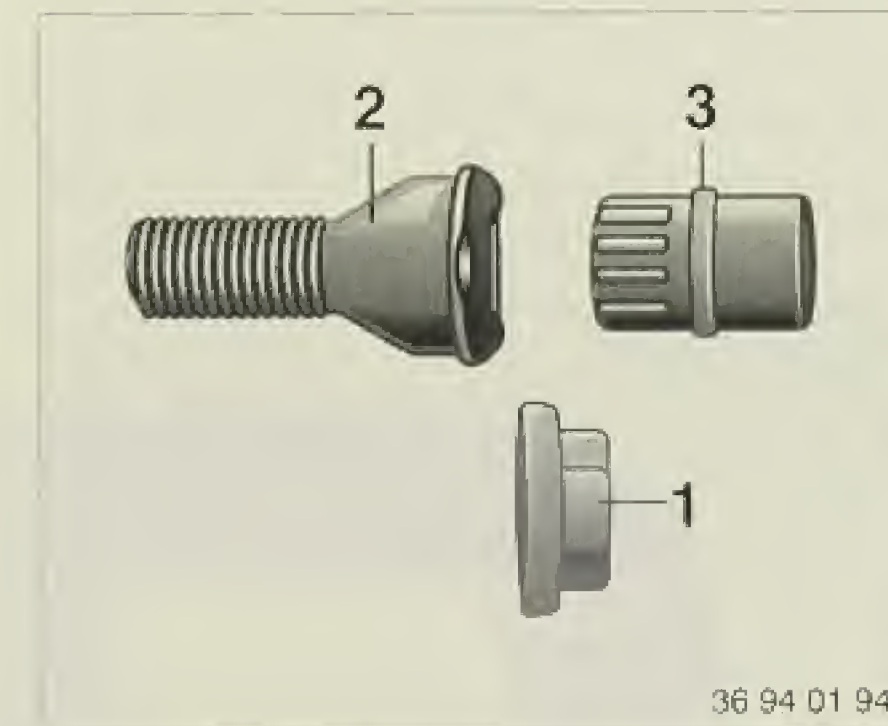
When tubeless tyres are removed and fitted or renewed, a new rubber-pattern valve should always be used as a safety precaution.

#### Size 255/45 ZR 18 tyres\* on the rear wheels

In the event of a puncture, it may be necessary to fit the 235/50 ZR 18 spare wheel at the rear. Although this wheel can be used entirely satisfactorily in all load and speed ranges, a 255/45 ZR 18 tyre should be fitted again as soon as possible.







The code number is embossed on the front of the adapter. Please make a note of this number and keep it in a safe place in case you lose the adapter.

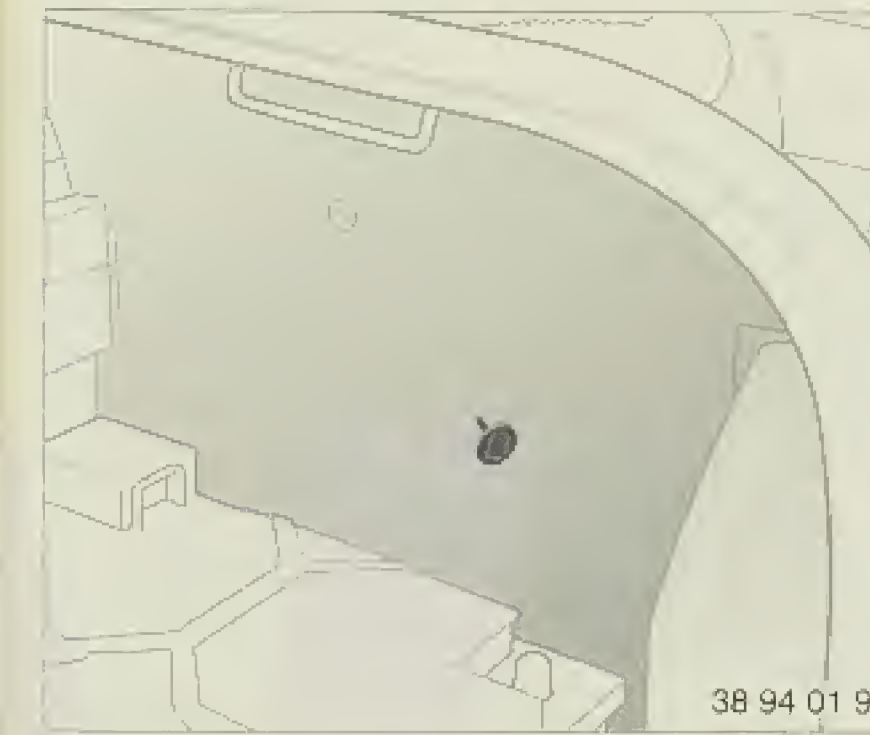
### Thiefproof wheel studs

1. Stud cap (not for wheels with wheel stud cover)
2. Wheel stud for adapter
3. Adapter (supplied in toolkit)

#### To remove:

- Turn stud cap (1) slightly anti-clockwise with the wheel stud wrench and remove.
- Take adapter (3) from the car's toolkit and insert it into the wheel stud.
- Unscrew the wheel stud (2).

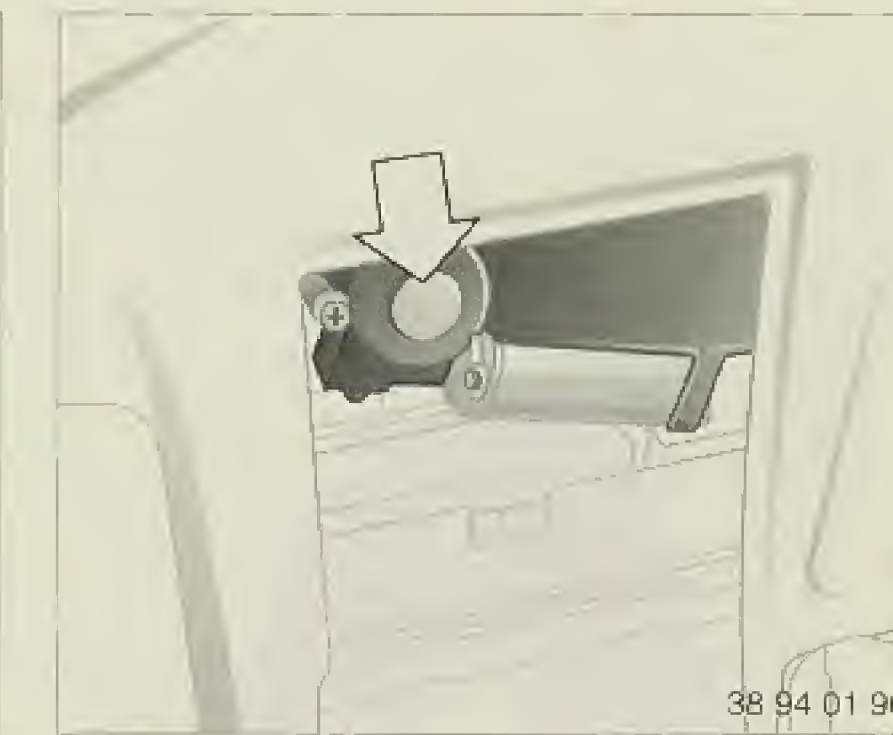
After inserting and tightening the wheel stud again, remove the adapter and press on the stud cap.



### Manual operation of equipment after electrical failure

#### Releasing the fuel filler flap

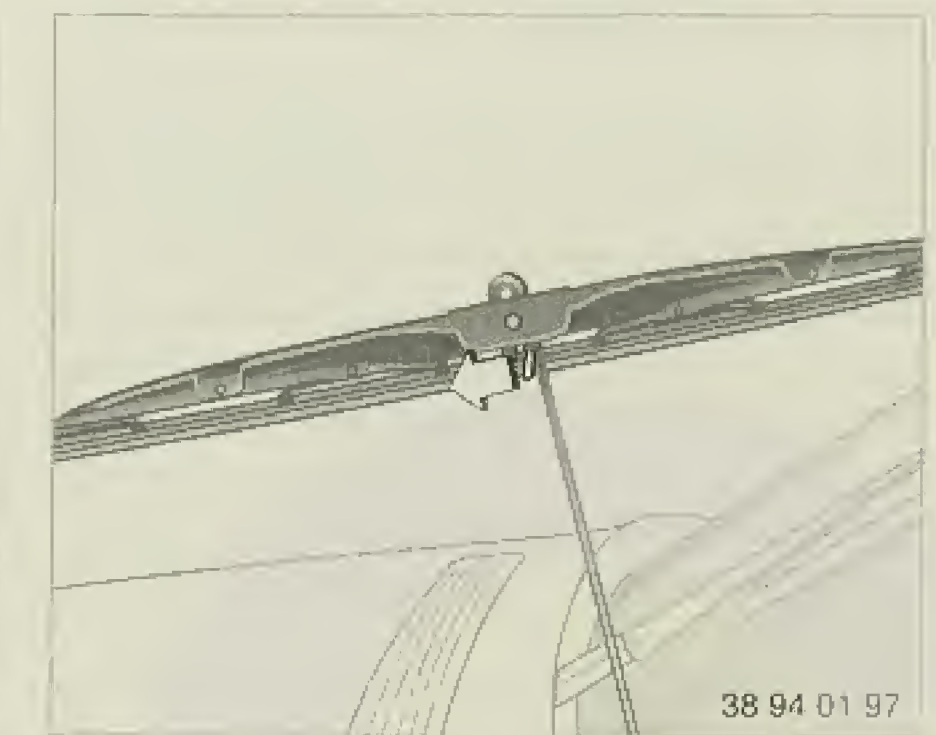
Fold down the right-hand side trim in the luggage compartment using the handle and pull the knob with the pump symbol.



#### Sliding/tilt roof

- Press out the interior light (see "Changing a bulb", Page 111), reach behind the aperture and press out the cover.
- Remove the stopper (arrow) and turn the sliding/tilt roof in the desired direction with the Allen key from the car's toolkit.

Have the fault rectified by a BMW service station without delay.



### Renewing wiper blades

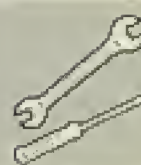
- Move the wipers to the fold-out position:  
Switch on the ignition.  
Move the wiper control lever to position 1 (intermittent wipe).  
Switch the ignition off again between wiper movements. The wipers will then move up to an almost vertical position.
- Lift the wiper arm away from the glass and hold it securely.

- Pull the spring keeper (arrow), then pull off the wiper blade towards the arm.

When inserting a new wiper blade, make sure that it engages securely.

#### Important:

Fold the wipers back down on to the windscreen before turning ignition key to position 1 or 2.





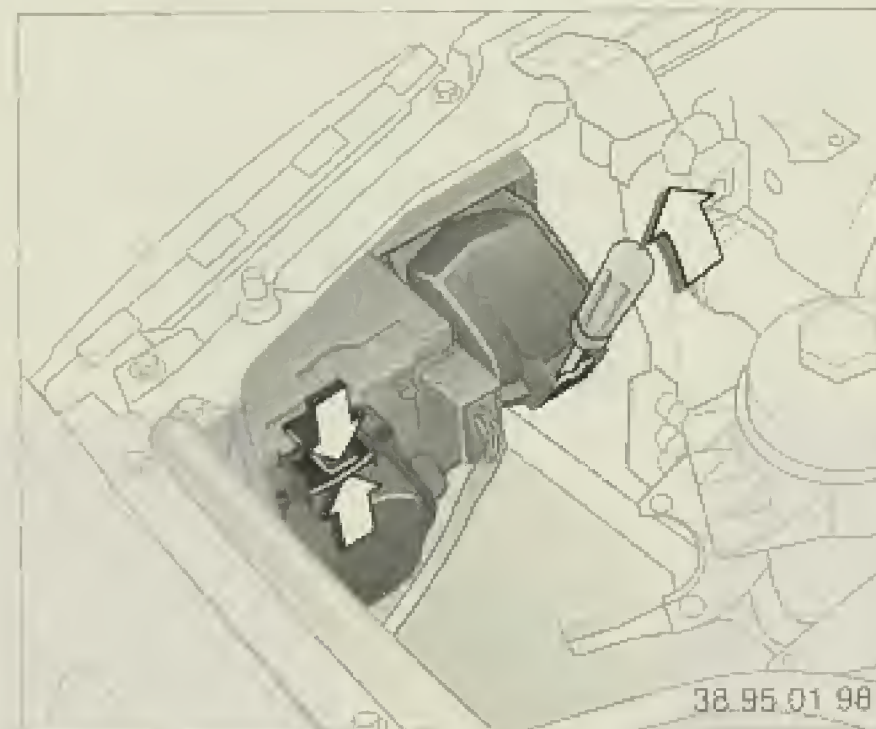
**Bulb changing**

To avoid short circuits whenever working on the electrical system, switch off the affected consumers or disconnect the negative terminal of the battery.

Before attempting any work with which you are not thoroughly familiar, it is better to entrust it to a BMW service station.

Do not touch the glass of new bulbs with bare fingers. Use a clean cloth, paper tissue or similar instead, or handle the bulb only by its base.

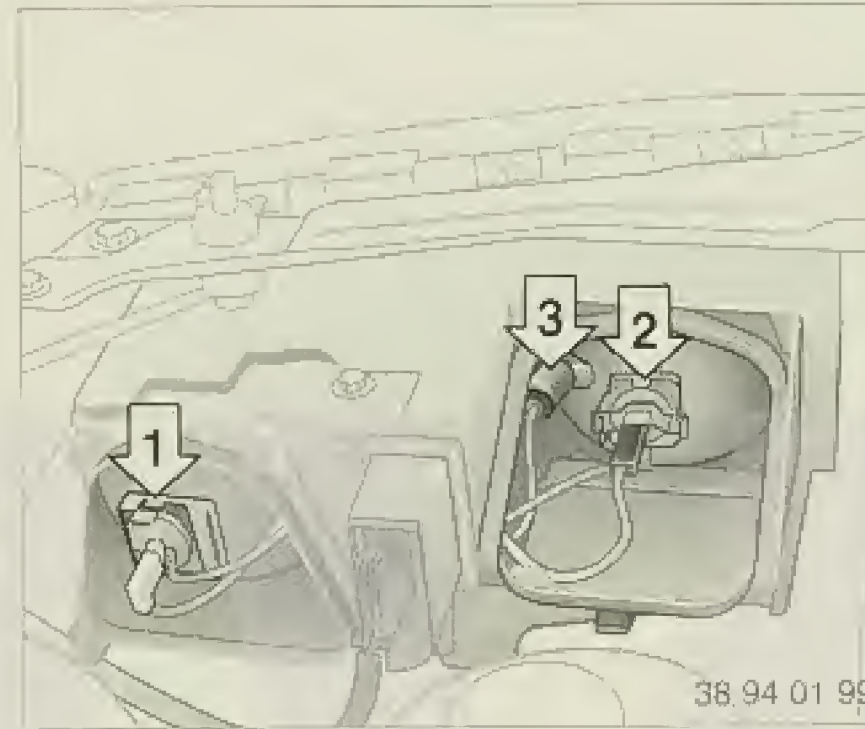
A box containing spare bulbs is available from your BMW service station.

**Dipped (1) and high-beam (2) headlights**

Dipped headlights: H1, 55 Watt bulb  
High-beam headlights: H7, 55 Watt bulb

Disengage the bulb cover:

- Dipped headlights: squeeze together the tabs (arrows)
- High-beam headlights: introduce screwdriver (from toolkit) and press in the direction of the arrow
- Remove the cover
- Pull off the plug
- Disengage the wire clip
- Change the bulb.

**Side and parking lights (3)**

5 Watt bulb

- Pull out the bulb holder
- Pull out the bulb and change.

**Xenon lights \***

The light source of this dipped headlight is a gas discharge bulb.

When switched on, a high electrical charge is passed through the pressurized gas (xenon) inside the bulb. The full lighting effect is achieved after a slight delay. Appropriate safety circuits are installed as a precaution.

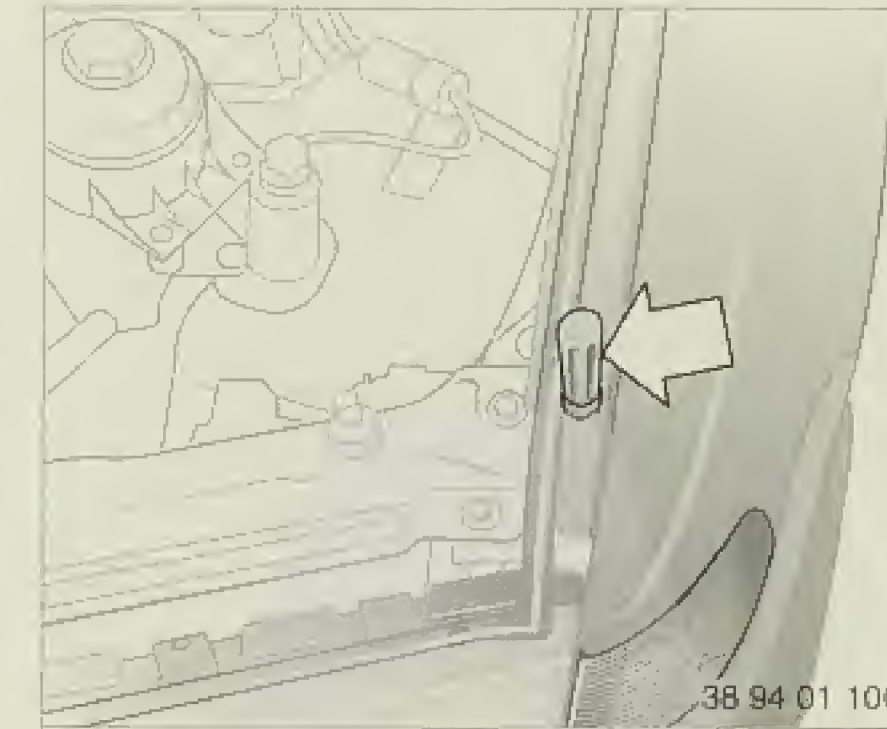
The light yield, which is almost three times that of conventional headlights, illuminates in particular the area in front of the car and along the roadside with the aid of the special optical system.

The bulb has an extremely long operating life. Signs of bulb fade include flickering, a marked reddish hue and a decline in light intensity. Unnecessary switching on and off shortens bulb life.

If a bulb fails, you may continue your journey using the fog lights (where permitted by law) and adopting a suitably cautious driving style.

**Warning:**

**Any work on the lights, including bulb-changing, should only be carried out by suitably qualified personnel.**

**Side turn indicator repeater\***

5 Watt bulb

- Press out the light at the rear edge with a screwdriver
- Press the bulb in slightly, turn to the left and remove.

**Flashing turn indicator**

21 Watt bulb

- Insert a Phillips-head screwdriver (arrow) as far as the stop and remove the screw (approx. 4 turns)
- Take out the bulb to the front
- Release the bulb holder and take out
- Press the bulb in slightly, turn to the left and remove
- After changing the bulb, insert the light in the recess together with the tongues, push back and screw to secure.





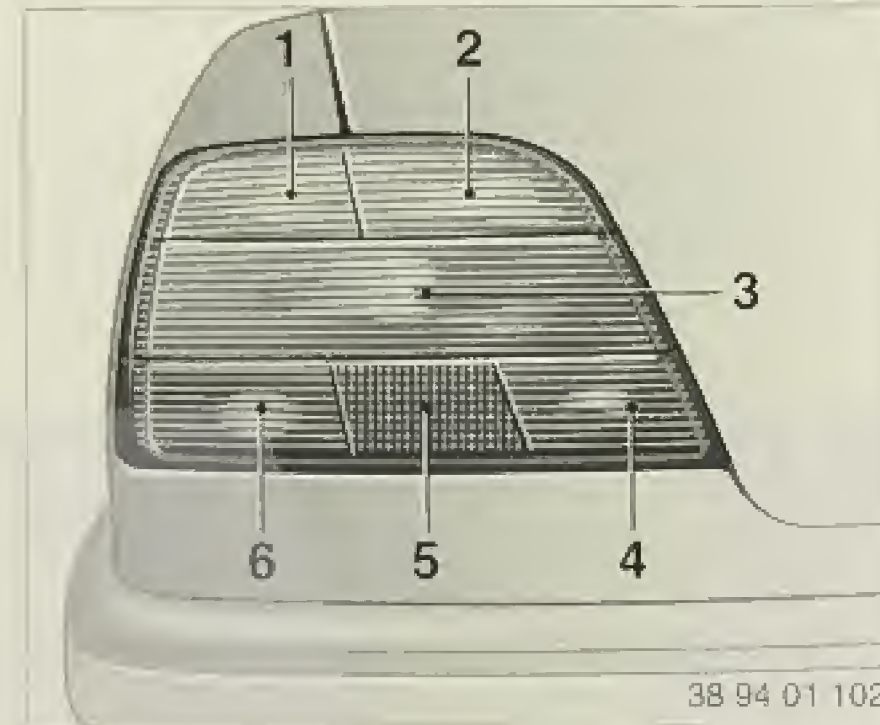


38 94 01 101

### Fog light

H3, 55 Watt bulb

- Release the fog light holder with the aid of a screwdriver (arrow)
- Lift out the fog light to the front
- Release plastic cap on the back of the light and remove
- Pull off the plug
- Release the spring wire clip
- Change the bulb
- After changing the bulb, push the light back in until it is heard to engage in position.



38 94 01 102

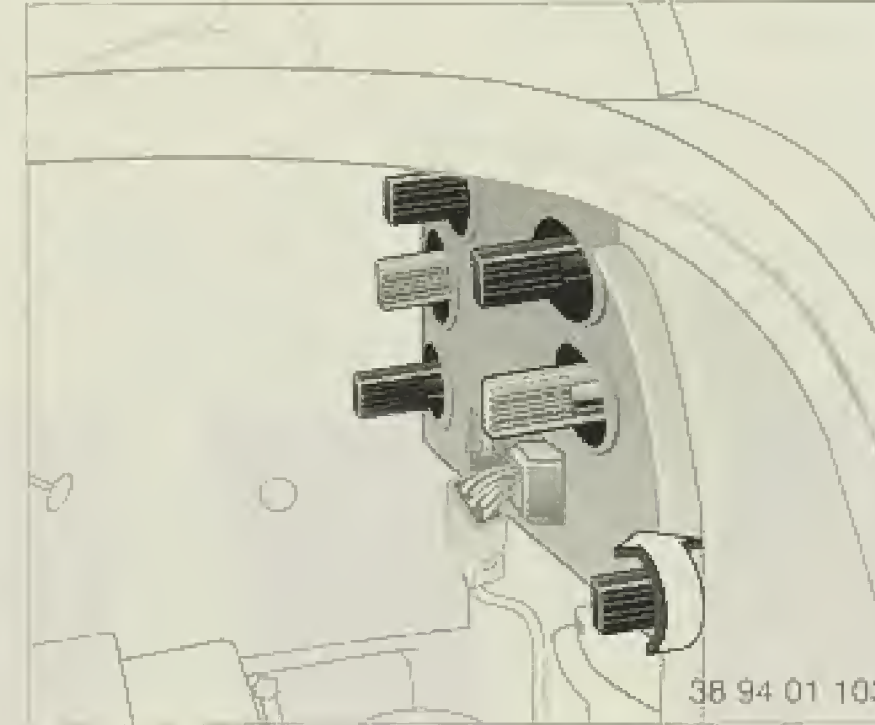
### Rear lights

Rear light: 5 Watt bulbs

Other lights: 21 Watt

- 1 Turn indicator
- 2 Reversing light
- 3 Stop lights
- 4 Rear fog light
- 5 Reflectors
- 6 Brake light

yellow  
white  
red  
red  
red  
red



38 94 01 103

- Swing down the side trim in the luggage compartment by means of the handle at the top
- Press the appropriate bulb holder in slightly, turn to the left and remove
- Remove the bulb in the same way.

### Central brake light\*

21 Watt bulb

- Open the luggage compartment lid
- Remove the grommet from the bulb holder beneath the rear-window shelf
- Press the bulb holder in slightly, turn to the left and remove
- Take out the bulb in the same way.



38 94 01 105

### Interior lights

#### Front:

Interior light (10 Watt bulb) with reading lights (10 Watt bulbs)

- Interior light: press out light at one side with a screwdriver and remove the glass. Pull the bulb out of the contact tongues.
- Reading light: press the bulb in slightly, turn to the left and remove.

#### Rear:

Interior light (10 Watt bulb) with reading lights (5 Watt bulbs)

- Press out light at the recesses at the top with a screwdriver.
- Interior light: press back the tongue at the reflector and change the bulb.
- Reading light: press the bulb in slightly, turn to the left and remove.

### Footwell lights

5 Watt bulb

- Lever the glass out at one side with a screwdriver.
- Change the bulb.

### Door warning lights

5 Watt bulb

- Press the narrow side of the light with a screwdriver to remove
- Turn the light holder to the left and remove
- Change the bulb.

### Glove box light

5 Watt bulb

- Press out light at the recess with a screwdriver
- Take off the reflector
- Change the bulb.

### Luggage compartment lights

10 Watt bulb.

- Lights on underside of rear-window shelf and in luggage compartment lid:
- Press out light at the recess with a screwdriver
  - Take off the reflector
  - Change the bulb.





## Winter operation

The changeable weather in the winter months calls not only for a suitably cautious style of driving but for certain measures to be taken on the car to ensure that it can be driven safely and without problems throughout the winter.

### Measures to be taken on car

Before the cold season of the year sets in, it is good practice to have the BMW service station prepare the car for the winter.

### Brakes

Have the brake system checked by a BMW service station regularly before and after the winter season. The work can be combined with routine maintenance.

### Engine oil

Comply with the relevant instructions (see Page 91); if possible, have an oil change carried out before the cold season starts.

### Oil level check

At manual gearbox or automatic transmission, final drive, power steering and brake system hydraulics.

### Coolant

Make sure that the mix ratio of 50:50 (water to long-life antifreeze with corrosion inhibitor) is present. It should remain in the system all the year round, and provides protection down to a temperature of app. -37 °C. Renew the coolant every 3 years.

### Cooling system

Check the cooling system for leaks and renew any coolant hoses which have become brittle or porous.

### Battery

A well-charged battery is essential if the engine is to start reliably. Remember that the battery is less efficient at low temperatures, in other words precisely when the load on it increases.

### Locks

Use only factory-approved care products<sup>1)</sup> to ensure reliable operation. They will also prevent the locks from freezing. If a lock freezes despite this precaution or as the result of a malfunction in the lock heating, it can be thawed out with a heated key blade.

Do not use de-icer, as it has a degreasing effect and will impair the functioning of the locks.

### Rubber seals on doors and engine and luggage compartment lids

To prevent the seals from freezing together, treat rubber surfaces with a rubber care product<sup>1)</sup> or silicone spray<sup>1)</sup>.

### The car's paintwork and polished parts

Protect with the appropriate care products<sup>1)</sup> before and during the winter months.

### Radiator and radiator grille

Do not blank off the radiator or fit a blind. The thermostat, which responds to engine load and outside temperature, will otherwise be unable to control engine temperature correctly.

### It is a good idea to carry the following items in the car:

**Sand**, for starting on ice-covered slopes,  
**A shovel**, in case the car has to be dug out of a snowdrift,

**A board**, to support the car's jack on a soft surface,

**A hand brush and ice scraper** to remove ice and snow from the body and windows.

**BMW snow chains\*** for all severe winter driving conditions. These can be fitted to various summer or winter tyres, but only in pairs on the driven (rear) wheels. Always observe the tyre manufacturer's safety recommendations. Do not exceed **50 km/h (31 mile/h)** with snow chains fitted.

<sup>1)</sup> Available from BMW service stations

**Take the decision to fit the snow chains in good time.** They not only enhance safety in snow and ice but also improve hill-climbing and shorten braking distances. Note, however, that the car handles differently in all circumstances when snow chains are fitted.

Do not leave the snow chains fitted for longer than necessary. Chain wear on a snow-free road surface is many times higher than if the surface is covered with snow.

Comply with national legal requirements. Any BMW service station will provide you with further details.

### Winter driving hints

Allow ample time for delays caused by poor weather and road conditions when planning winter journeys. Information on whether main roads can be used is usually available from the press, radio and TV, from automobile clubs or by dialling a special telephone number.

### Before starting the journey

Clean ice and snow off the windows, mirrors and lights. After a heavy fall of snow, the snow lying on the roof and the engine and luggage compartments should be removed and the air entries below the windscreen cleared, so that the interior heating and ventilation function correctly.

Before entering the car, the driver should try to remove snow, slush and ice from his or her shoes, in order not to slip off the pedals.

Do not drive the car in ski boots or similar bulky footwear, as this makes it difficult to operate the pedals with the necessary precision.

### After a cold start

For the first few kilometres/miles, when the oil is still cold and highly viscous (particularly at temperatures below -15 °C), the gear lever may be rather stiff to move and the suspension damping may seem harder than usual (and possibly generate a certain amount of noise).

### Easier starting from a standstill

If the car is driven on icy or snow-covered roads or in the mountains and the payload is only slight, 30 to 50 kg (65–110 lb) of ballast can be carried in the luggage compartment. Secure it to prevent it from slipping.

### Driving on slippery roads

Operate the accelerator pedal sensitively, avoid high engine speeds and shift up to the next higher gear early. On uphill or downhill gradients, select the next lower gear in good time. Maintain a generous distance from the vehicle in front as a safety precaution.

### Brakes

Winter road conditions greatly reduce the amount of tyre grip that is available, so that the driver must expect braking distances to be considerably longer than usual in every situation.

ABS prevents the wheels from locking, so that the car remains stable and can always be steered. Should the ABS fail and the road wheels therefore lock, reduce pressure on the brake pedal immediately so that the wheels can still turn although they are being braked. Then increase pedal pressure again until the same situation occurs, and repeat this as often as necessary. This "cadence braking" principle cuts braking distances and keeps the car steerable, so that you can try to drive round obstructions at reduced braking pressure.

**Warning: On a slippery surface, do not shift to a lower gear as a means of braking the car, or the rear wheels may lock and cause the car to skid or the driver to lose control. ABS and ASC+T\* or DSC\* cannot counteract this form of wheel locking.**





**Note:**

When applying the brakes hard on slippery roads or if the amount of surface grip varies widely, always declutch as well.

**If the car skids**

Take your foot off the accelerator and depress the clutch or move the automatic transmission selector lever to N. Try to steer into the skid and bring the car under control in this way.

**Car unable to move**

(deep snow, sand or other soft surfaces): Obtain help to push the car out before its tyres dig deep ruts in the soft surface; if no help is available, place material under the rear wheels to provide more grip (in an emergency, the car's floor mats can even be used). With a degree of skill the car can be rocked out of the ruts by engaging forward and reverse gear several times in quick succession. Do not allow the rear wheels to spin violently, or they will fail to grip and could dig themselves in even deeper. Applying the parking brake lightly will prevent one driven wheel from spinning excessively.

**Warning:**

**If the car becomes immobilized in snow or sand, make sure that the exhaust pipes and the surrounding area are clear of snow or sand when the engine is running. There is otherwise a risk of odourless but highly toxic carbon monoxide entering the car and rendering the occupants unconscious with fatal consequences. Open a window slightly on the side of the car away from the wind to ensure an adequate supply of fresh air.**

**Parking**

Select 1st gear or reverse, or move the automatic transmission selector lever to P. If parked on a slope, apply the parking brake as well. To prevent the parking brake linings from sticking to the drums as a result of frost or corrosion, dry the drums by applying the parking brake lightly as the car is coming to a halt.

**After a break in the journey or when refuelling**

Remove snow and ice that has built up in the wheel arches in case it interferes with steering or suspension movements.

**Towing a trailer**

When a trailer is towed, the demands on both car and driver are more severe.

A trailer reduces manoeuvrability, the ability to climb hills, acceleration and braking capacity and makes the car handle and corner differently.

For the **trailer weight limit** and **towbar downthrust** (nose weight), please refer to the "Technical Data" on Page 136. The trailer weight limit is also shown in the car's registration papers (depending on national regulations). Consult any BMW service station regarding increased trailer weights.

**Nose weight**

This is the load exerted downwards by the trailer on the ball head of the tow hitch (it can be determined with the aid of bathroom scales or similar).

In Germany a minimum nose weight of 25 kg (55 lb) is laid down by law.

The nose weight limit should if possible be fully utilized but not exceeded.

The trailer's nose weight affects the towing vehicle, and must not lead to the car's gross weight limit or rear axle load limit being exceeded. The car's payload is reduced by the weight of the trailer tow hitch, and also by the nose weight if a trailer is being towed. The gross weight limit for the car and trailer combination must not be exceeded.

When **loading the trailer**, make sure that the weight is kept as low as possible and stowed if possible close to the axle.

A low centre of trailer gravity makes the outfit much more stable and safe to drive. Do not exceed either the trailer's gross weight or the specified trailer load limit for the car. The smaller value is the limit which should be adhered to.

The **trailer tow hitch\*** with detachable ball head should be of BMW-approved pattern and should be expertly installed by a BMW service station.

Keep the detachable ball rod greased to make fitting and removal easier.

**Note on electrical equipment:**

Higher electrical consumption can be expected if a trailer (caravan) is towed. Switch on high-consumption items in particular for as short a period as possible in order to avoid draining the battery. The permanent power supply to the trailer is protected by an undervoltage and overload circuit.

Before acquiring a trailer it is desirable to obtain from the manufacturer a **guaranteed statement of the effective trailer weight and the payload limit**.

The **suspension settings** of your BMW afford optimum safety, ride comfort and sports performance. They are also perfectly suitable for towing a trailer at up to the standard specified weight, provided that towing is restricted to one vacation period per year or thereabouts, and the driving style is modified to allow for the more severe operating conditions.

If a trailer tow hitch is fitted by the manufacturer, the vehicle will also be equipped with **trailer-towing suspension\*** as standard. This compensates for the weight of the tow hitch and also ensures optimum road behaviour when the trailer is not being towed.

If the trailer tow hitch is retrofitted, it is also recommended to retrofit the trailer-towing suspension. It is also essential if higher trailer weights are to be towed (possible with certain types of trailer).

BMW does not approve of any other suspension systems offered by the automotive trade for trailer towing purposes.

**Note:**

If a trailer tow hitch is installed, the self-regenerating action of the rear bumper system may not be able to take effect.

The use of a **stabilizing device** can be recommended, particularly if the trailer is a heavy one. Information can be obtained from a BMW service station.

The standard **outside mirrors** may prove inadequate for trailer towing work: the law lays down that the car should be equipped with two outside mirrors with which the rear corners of the trailer can be seen (please check and comply with national regulations in this respect). Mirrors of this kind, including versions with adjustable arms, can be obtained from BMW service stations.





In the interests of safety and the avoidance of traffic obstructions, the **maximum gradient** (applicable at sea level) is limited to 12% (1 in 8.3) or, with a higher trailer load if specifically authorized, 8% (1 in 12.5).

As altitude above sea level increases, engine power output tends to drop. You should therefore take particular care when driving through the mountains, since the maximum gradient on which the outfit can be started may be lower than usual. Do not make full use of the car's and trailer's gross weight limits.

Special care must be taken when **descending gradients**, since the trailer brakes are often limited in their efficiency. Always shift down to the next-lower gear at the top of a steep hill (if necessary, right down to 1st gear or by selecting automatic transmission position 2 manually) and descend the hill with great caution.

**Before driving in mountain regions**, have the serviceability of the trailer brakes checked by an authorized workshop.

Since ABS prevents the car's wheels from locking, you are recommended to provoke the ABS into action if necessary when braking. On roads with a low-friction or slippery surface in particular, the outfit's total braking distance can be distinctly reduced by this procedure.

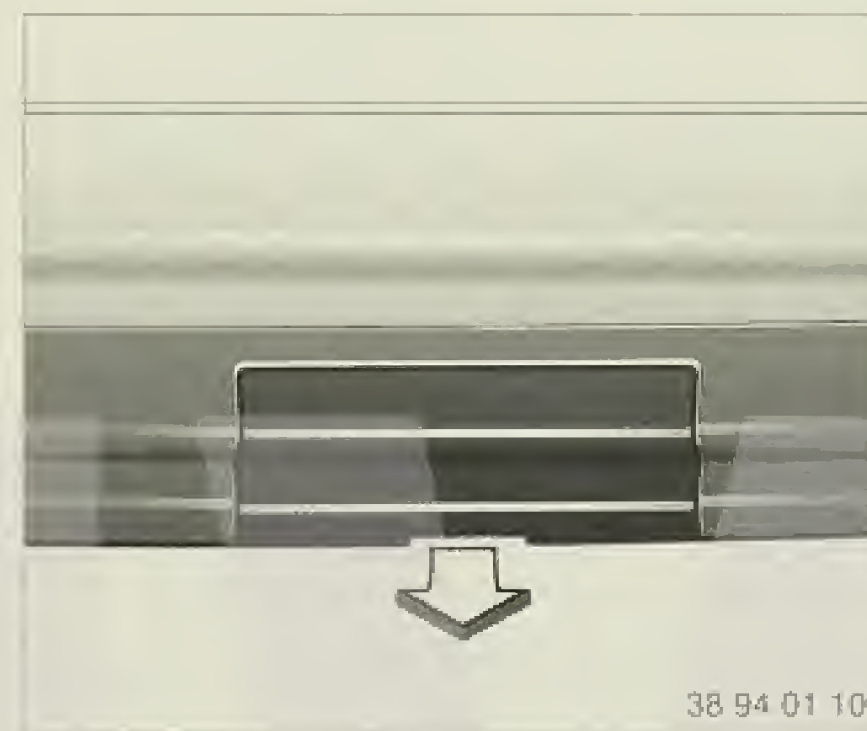
The **maximum speed limit** when towing a trailer is 80 km/h (50 mile/h) in Germany, and similar speed limits apply in other countries also. The trailer load limits have been chosen to ensure ample driving stability up to this speed. If higher speed limits apply in other countries, you are none the less recommended not to drive faster for safety reasons.

If the trailer begins to **swing from side to side**, the outfit can only be stabilized by braking immediately.

Check the car's and the trailer's **tyre pressures** most carefully. Comply with the trailer manufacturer's tyre pressure instructions.

**Warning:**

**Always check that the trailer's rear lights are working before starting a journey.**



**Cover flap for trailer tow hitch**

Take hold of the cover flap at the cutout, pull back downwards (arrow) and remove from the upper guide.

For attaching and removing the ball head, please refer to the accompanying instructions.

To install the cover flap, first insert it at the top, press into place, then press up the lower section of the flap to engage. The flap is properly in place if it does not protrude out of the rear apron at any point.

**Roof rack\***

A loaded roof rack alters the car's road behaviour and steering response quite considerably by moving its centre of gravity.

When loading the roof rack, ensure that the specified roof load limit, the car's gross weight limit and the axle loads are not exceeded.

A special roof rack system is available as an accessory for your BMW (in preparation). If it is used, please comply with the installation instructions supplied.

The roof load must be uniformly distributed and should not be too large in area. Heavy items of luggage should always be placed at the bottom.

Correct, secure loading of the roof rack will prevent items from shifting or falling off during the journey, and thus endangering following traffic.

Drive smoothly when there is a load on the roof: avoid violent acceleration, braking or cornering.

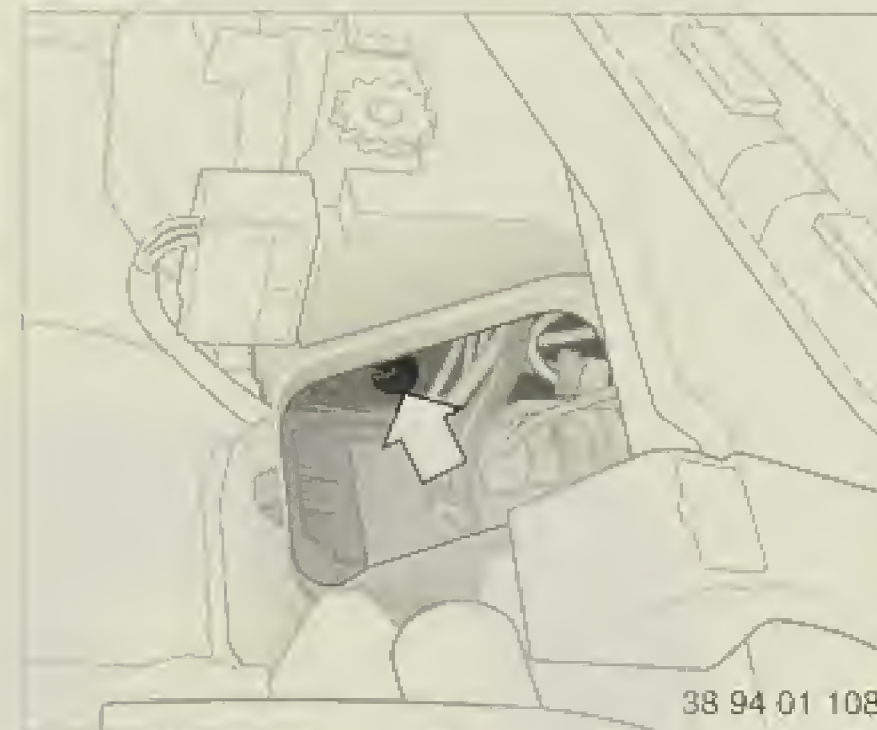
The roof load also increases the car's surface area exposed to the wind, so that fuel consumption will be higher and the loads on the roof structure of the car more severe.

Remember to take off the roof rack when it is not needed.

Comply with national regulations regarding the load on the car.







### Resetting headlight beams for left/right rule of the road

When entering a country in which the traffic drives on the other side of the road:

- Release the high-beam headlight covers and take off (see Page 108)
- For driving on the left: turn the cover (arrow) downwards
- For driving on the right: turn the cover upwards

### Licensing car for use abroad

Cars are always supplied to conform with the registration laws of the country in which they are intended for use.

If the owner moves to another country, it is important to check beforehand that import regulations and vehicle licensing laws do not render the importing of the car too difficult.

Information can be obtained by telephoning (Germany) 89-382-0 if the model, vehicle identification number and date of first registration are quoted.

### Antilock brake system (ABS)

ABS prevents the wheels from locking when the brakes are applied, and thus increases active safety. With ABS in action, the car achieves the shortest possible braking distances for the prevailing conditions (straight-line braking or cornering, on asphalt, ice, wet roads etc.).

ABS is capable of satisfying two fundamental requirements whenever the brakes are applied:

- Assured driving stability on varying road surfaces (e.g. asphalt, concrete, mud, wet roads, snow and ice).
- Assured steerability and manoeuvrability in these conditions.

However, certain important considerations must be borne in mind in connection with these requirements:

Even ABS is unable to eliminate the effects of natural physical laws. It cannot absolve the driver from the consequences of braking too late, maintaining insufficient space from vehicles ahead, exceeding the limits of adhesion when cornering at speed or encountering a poor stretch of road where aquaplaning occurs. Avoiding such situations or coping with them effectively remains the driver's responsibility.

Although ABS enhances active driving safety, this should not be regarded as an invitation to take correspondingly severe risks.

### Driving with ABS

After the engine has been started, the yellow **ABS warning light** on the instrument panel goes out.

The ABS system itself becomes operational above a road speed of approx. 8 km/h (5 mile/h). If the car's speed falls below approx. 3 km/h (app. 2 mile/h), the ABS ceases to operate, so that the wheels could theoretically lock in the very last phase of braking, but in practice this is hardly critical.

The ABS regulating cycle takes place within fractions of a second. The brake pedal pulsates to warn the driver that the ABS is active and therefore that the car is reaching the adhesion limit. A chattering sound, resulting from the brake pressure regulating process, is also heard, as a reminder that tyre grip is diminishing (low-grip road surface) and that road speed should be lowered accordingly.

#### Warning:

**If the road surface consists of loose material on a firm underlayer, for instance stone chippings or powdery snow, the car's braking distance may sometimes actually be longer than if the wheels were to lock. The same applies if snow chains are fitted. However, the advantages of greater stability and the ability to steer while braking are still available to the driver.**

To ensure that the ABS system always remains fully operational it must never be modified in any way, and all work on the ABS should be entrusted only to skilled, authorized personnel.

ABS may not operate at full efficiency if different tyre sizes are fitted (for instance winter tyres or the spare wheel). In the latter case, the regular wheel and tyre should be repaired and refitted as soon as possible.

Any malfunction is shown by the **yellow ABS warning light** on the instrument panel coming on. In this situation the car's brakes continue to work normally, as on a vehicle without ABS, with no restrictions to their performance whatever.

**To prevent any multiple faults from impairing the brake system, the necessary repair work should be carried out at the next possible opportunity.**





### Disc brakes

Disc brakes offer maximum braking efficiency, responsive control of braking force and the ability to resist severe loads.

#### Load capacity of the brakes

Since the brakes reach high temperatures, for instance when descending mountain passes or when the car is driven very hard indeed, they need to be cooled equally effectively. This is achieved only by the airflow across the brakes and the peripheral speed of the rotating discs. If the brakes operate at high temperatures, these will reach the brake fluid and the pads. As a result, the brakes will lose efficiency, pedal travel will increase and more effort may have to be applied. However, the boiling point of the brake fluid is so high that these limits are unlikely to be reached except under genuinely extreme loads or if the car is not driven in a sensible fashion.

#### Corrosion and dirt

Moisture, dirt, the salt often spread on the roads in winter and corrosion of the brake discs can affect the car's braking performance: braking distances become longer, braking force distribution alters and the friction values at the wheels vary, so that the brakes may pull to one side.

If the car is not driven very far, is parked out of use for lengthy periods or is mostly driven very gently, corrosion of the brake discs and contamination of the pads may unfortunately be encouraged, since the minimum pressures between pad and disc which are needed to obtain an automatic cleaning action are seldom reached.

When the brakes are applied, corroded discs tend to judder, and even lengthy brake applications usually fail to eliminate this effect entirely.

Dirt burnt into the brake pad surfaces, or glazing over as a result of severe heat build-up, tends to score the brake discs, reduce or alter the quality of the braking action and cause squeaking.

#### Warning:

**Only use brake pads approved by BMW, otherwise the vehicle's general operating permit will be invalidated.**

### Driving hints for cars with disc brakes

If the traffic situation permits, it is a good idea to apply the brakes fairly firmly once or twice from quite a high speed at infrequent intervals. The resulting high pressure enhances the self-cleaning action of the discs and pads.

In the same way, the brakes should be deliberately applied fairly hard at intervals on longer journeys in poor weather conditions, particularly in winter when salt has been spread on the roads. This not only tests the efficacy of the brakes in the prevailing weather conditions (though care must be exercised at temperatures close to freezing point), but each "test brake application" also ensures that the brakes are restored to a fully operational condition, thanks to the resulting self-cleaning effect.

In damp weather or heavy rain it is advisable to apply the brakes with light pedal pressure every few kilometres. This will generate sufficient heat to dry out the discs and pads.

If the car is parked after a journey in the rain or over salt-strewn roads, keep the brakes applied lightly until it comes to a standstill. This will dry the discs and help to delay corrosion.

In the early stages of brake disc corrosion, several powerful brake applications at speed may succeed in eliminating the problem, but great care must be taken not to endanger other road users.

If brake disc corrosion is already severe and the brake pads are contaminated with dirt or glazed over, the discs and pad surfaces must be checked, cleaned and repaired by a BMW service station.

It is a well-known fact that the most effective braking is obtained not with locked wheels but when they are still just rotating. ABS maintains this state of affairs automatically. Should the ABS malfunction, the driver should adopt the cadence braking principle if possible (see Page 113).

Locked wheels are dangerous, because the front wheels cannot then be steered and the rear wheels may slide sideways and cause the car to spin or slide off the road.

To avoid any risk of brake fade when descending long, steep hills, select the gear which calls for a minimum amount of braking (or shift the automatic transmission down to an equivalent speed stage). Engine braking is more powerful in a lower gear; on a very severe gradient, therefore, you should even shift down as far as first gear or automatic transmission selector position 2 if necessary.

If engine braking alone is insufficient, do not apply the brakes for too long with only slight or moderate force. Instead, it is better to brake the car quite hard (providing that the road behind you is clear) to reduce your speed noticeably, and to repeat this process at brief intervals as necessary. The cooling-down phases between these brake applications should avoid overheating and maintain full braking efficiency.

#### Warning:

**Never hold the clutch pedal down, move the gearbox or automatic transmission into neutral or – an even more dangerous practice – switch off the engine while the car is in motion. Engine braking is lost in neutral, and there is no brake servo effect when the engine is stopped.**

**Make sure that the full travel of the brake, clutch and accelerator pedals is never obstructed by the floor carpet, loose mats or any other items.**





## Tyres

### Information for your safety

The factory-approved radial-ply (braced tread) tyres have been chosen to match your car's performance and to ensure driving safety and the desired standard of ride comfort.

**The condition of the tyres and maintenance of the specified tyre pressures not only influence tyre life but also road safety to a very considerable extent.**

Incorrect tyre pressures are often a cause of tyre problems. They also have a considerable effect on the roadholding of your BMW.

For your own safety you are recommended to check tyre pressures **regularly**, before starting a long journey and in any case **at least once every two weeks**.

Make sure in particular that the specified tyre pressures are maintained if the load on the car is increased and when driving at continuous high speeds. Lower pressures than those specified will reduce stability and driving safety, because lateral locating forces are lower. The tyres will be less capable of withstanding high speeds and will heat up more rapidly as a result of excessive flexing. The associated higher roll resistance will cause fuel consumption to deteriorate and could lead to tyre damage and accidents.

Remember that if a tyre suffers concealed damage it may only fail much later or when exposed to a less severe load.

If a tyre loses pressure severely, always have the cause investigated and put right. Remember to check the spare wheel's tyre pressure too, and keep this approx. 0.3 bar (3–4 psi) higher than the specified value for heavier loads, so that the wheel can always be fitted without its tyre having to be inflated further.

Higher tyre pressures reduce ride comfort and lead to premature tread wear.

### Warning:

**Over-inflating the tyres can cause tyre damage or, in certain circumstances, sudden loss of pressure, because the tyres are more sensitive to loose objects on the road or sharp-edged potholes.**

Tyres are exposed to very severe loads at high speeds, particularly in hot summer weather and when the car is heavily laden. Please comply with the specified higher tyre pressures for heavier loads, and do not exceed the **permitted axle loads**.

### Tread depth and tyre damage

Inspect tyres frequently for damage, the presence of foreign bodies, unusual wear and sufficient tread depth.

Although the law in many countries calls only for a minimum tread depth of 1.6 mm (if indeed any minimum figure is laid down), you are recommended to replace tyres when the tread depth is down to 3 mm, or else the risk of aquaplaning even on shallow water will be increased.

Since the danger of aquaplaning always increases with the car's road speed, this should be kept down if the road is wet and the tyres are known to be fairly well worn.

We recommend fitting new tyres when the treads are 3 mm deep. If a tyre remains in use after this, wear indicators 1.6 mm from the main rubber surface are exposed as a sign that the legal wear limit has been reached (this has applied for instance throughout Europe since January 1, 1992).

The recutting of tyre treads for this car is forbidden, because of the risk of the carcass already having been damaged.

A **sharp object may** penetrate the tyre and cause a slow puncture. The resulting loss of air can only be detected if tyre pressures are checked regularly. If damage of this kind is suspected, the tyre should be inspected without delay by a BMW service station or an authorized tyre repair shop.

Drive with extreme care and at moderate speed if roads are poor or over unavoidable obstacles such as kerbstones, so that the **tyre carcass** does not incur any damage invisible to the naked eye.

When parking the car or driving over loading ramps, workshop hoists etc., make sure that the **sidewalls of the tyres** are not damaged by violent contact with obstructions.

### Warning:

**Avoid overloading the car. This can cause the tyres' load capacity limit to be exceeded, so that they overheat and internal damage is caused at a rate which cannot be detected from the outside, possibly leading to sudden pressure loss.**

**All forms of tyre damage (which could in the worst case lead to sudden and total loss of pressure) represent a risk of serious or even fatal injury to the car's occupants and to all other road users.**

**Never try to drive any further if a tyre goes flat. If a tyre loses its pressure, it seriously affects the car's handling and braking, and could cause the driver to lose control.**

## New tyres

To maintain the car's good road behaviour, always fit tyres of the same make and tread pattern to all wheels. BMW does not approve of the use of retreaded tyres on this car, since their carcasses may differ in internal construction or have aged sufficiently to cast doubt on their durability and therefore in certain circumstances on their road behaviour and safety.

### Interchanging wheels and tyres

Tread wear patterns are different at the front and rear wheels. In the interests of safety and the best possible vehicle behaviour, you are recommended not to adopt the practice of interchanging the wheels.

If it is felt that the wheels should be interchanged for reasons of operating cost, please note the following precautions:

Interchange the wheels on the same side of the car only (though the spare wheel can be included if desired).

Remember that braking efficiency and tyre grip may be adversely affected.

If tyres are interchanged in this way, the process should take place at frequent intervals (max. 5000 km/3000 miles).

Do not continue to use tyres that are more than 10 years old for normal driving unless they have always been used regularly in normal conditions. Failing this, they should be replaced.

Spare tyres more than 6 years old should be reserved for genuine emergencies, that is to say if the car's mobility cannot otherwise be maintained. New tyres should be fitted in their place as soon as possible, and they should no longer be brought into regular service when new tyres are fitted.

A tyre's date of manufacture is shown as part of the inscription on the tyre wall: DOT ... 413 means for instance the 41st week of 1993.





## Wheels and tyres

Use only BMW-approved tyres.

In view of the car's maximum speed, certain makes and sizes are compulsory. Details are available from any BMW service station.

Comply in addition with any relevant national regulations.

The correct choice is made easier if the meaning of the tyre markings is understood. Radial-ply tyres are marked as follows:

e.g. 235/60 R 16 100 W

Nominal width in millimetres — 235

Aspect ratio in % — 60

Code letter for radial ply — R

Rim diameter in inches — 16

Load capacity figure (not on ZR tyres) — 100

Speed code letter (ahead of the R on ZR tyres) — W

The speed code letter indicates the maximum permissible speed at which the tyre is to be operated.

On summer tyres:

S = up to 180 km/h  
 T = up to 190 km/h  
 H = up to 210 km/h  
 V = up to 240 km/h  
 W = up to 270 km/h  
 ZR = over 240 km/h

On winter tyres:

Q M+S = up to 160 km/h  
 T M+S = up to 190 km/h  
 H M+S = up to 210 km/h

Marks on light alloy wheels:

8 J x 16 H 2

Rim width in inches — 8

Shoulder pattern code letter — J

Symbol for well-base rim — x

Rim diameter in inches — 16

Hump on two rim shoulders — H

2

Prevent dirt from entering the tyre valves with **screw-on dust caps**. Dirt in the tyre valve can often lead to a gradual loss of air pressure.

## Winter tyres

If winter tyres (M&S radial-ply) are fitted, the same make and tread pattern should be used on **all four wheels** (and preferably on the spare wheel as well) in the interests of good directional stability and steering response.

Fit only **winter tyres approved by BMW**. Any BMW service station will gladly advise you on the correct winter tyres for the conditions in which your car has to operate.

Always note and comply with the maximum speed limit for your winter tyres.

In Germany, a **warning notice** stating the maximum permitted speed with winter tyres fitted must be displayed **in the driver's field of view** if the car is capable of a higher top speed (please check for similar local legislation).

Suitable labels are available from tyre suppliers or BMW service stations.

Below a tread depth of 4 mm, winter tyres become noticeably less suitable for winter driving conditions and should therefore be replaced without undue delay for safety reasons.

Keep to the specified **tyre pressures** and have the wheels and tyres rebalanced each time the wheels are changed or new tyres fitted.

## Note:

Lack of expert knowledge or incorrect handling of tyres can cause damage and lead to accidents.

All work on tyres should therefore be carried out only by experts. Your BMW service station will gladly assist you.

Store wheels and tyres in a cool, dry and preferably dark place when not in use. Protect tyres against contamination with oil, grease and fuel.





## Approved BMW wheel and tyre sizes for summer and winter:

Radial-ply tyre (tubeless)	Pressed-steel wheel (rim)	Light-alloy wheel	Offset, mm (in)
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## BMW 730i/iL, 740i/iL

215/65 R 16 98 W	–	7½ J x 16 H2	20 (0.79)
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235/60 R 16 100 W	–	7½ J x 16 H2 8 J x 16 H2	20 (0.79) 23 (0.91)
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245/55 R 16 100 W	–	8 J x 16 H2	23 (0.91)
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Front: 235/50 ZR 18	–	8 J x 18 H2	20 (0.79)
Rear: 255/45 ZR 18	–	9 J x 18 H2	22 (0.87)

## BMW 750i/iL

215/65 R 16 98 Q/T/H M+S	–	7½ x 16 H2	20 (0.79)
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235/60 R 16 100 W	–	7½ J x 16 H2 8 J x 16 H2	20 (0.79) 23 (0.91)
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245/55 R 16 100 W	–	8 J x 16 H2	23 (0.91)
-------------------	---	-------------	-----------

Front: 235/50 ZR 18	–	8 J x 18 H2	20 (0.79)
Rear: 255/45 ZR 18	–	9 J x 18 H2	22 (0.87)

Note the tyre and wheel data in the car's official documents. If sizes not approved by the manufacturer are fitted, an entry in the car's documents may be necessary. Comply with local legislation.

## Winter tyres

Same tyre and wheel size combinations as for summer tyres. Any exceptions are listed.

**BMW fine-link snow chains\*** may be used with either summer or winter tyres, and must then be fitted to both back wheels. Always observe the tyre manufacturer's safety recommendations when fitting.

There are no winter tyres for size 235/50 ZR 18 at the front and 255/45 ZR 18 at the rear, and **snow chains cannot be fitted**.

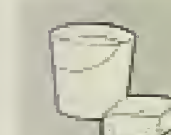
## Technical modifications to the car

Any BMW service station can provide you with information as to the practical value of an intended modification and whether it is legally permissible and approved by the manufacturer. Enquiries should be accompanied by the vehicle identification number and, if relevant, the engine number.

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### The BMW maintenance system

The BMW maintenance system has been planned to ensure that the car always remains safe for the road and reliable, without any unnecessary expense for the customer. Regular and correct maintenance also helps to maintain the car's resale value.

Advanced technologies have been adopted as a means of computing maintenance requirements, which are then shown on the Service Indicator. Whereas conventional maintenance schedules are based entirely on fixed distance intervals, the BMW maintenance system takes the car's operating conditions into account, bearing in mind that "one kilometre is not the same as another": 100,000 km completed exclusively in the form of short journeys cannot be equated with 100,000 km made up of long main-road journeys only.

The BMW maintenance system based on actual operating conditions consists of an Oil Service and Inspections I and II.

For further information on maintenance points and the scope of maintenance work, please refer to the car's Service Booklet.

Basing service intervals on the actual loads incurred accounts for most regular operating situations. However, if the car is very little used, that is to say if it covers distinctly fewer than 10,000 kilometres (approx. 6,000 miles) a year, an annual engine oil change should be carried out, since the engine oil ages even if not subjected to mechanical loads.

It may also be worthwhile to have the body checked for stone-impact damage at the same time, in order to safeguard against corrosion.

Please make sure that the maintenance work is confirmed in the car's Service Booklet. These entries are evidence that your car has been serviced regularly and correctly, and are also the basis of any warranty claims.

### Care of the car

The car's paintwork is built up in **several layers**, for protection against corrosion. In addition to cathodic dip coating with primer, the body cavities are specially protected with materials that have been subjected to stringent and successful testing for a number of years.

The entire underside of the floor pan is sprayed with a resilient PVC coating and then protected by a complete wax-based underseal coating.

Always remember that regular care of your car will go a long way towards maintaining not only its safe condition but also its resale value.

**Environmental influences** which differ from one region to another can affect your car's paintwork; the nature and frequency of the care you give the car should be governed by these factors.

**Road dirt**, tar stains, dead insects, bird droppings (powerful alkaline action) and also resin and pollen from trees and bushes all contain substances which could damage the paint surface after a period of time (stains, blistering, caustic burns, peeling off of the top paint layer).

In **industrial areas**, airborne fly ash, lime, oily soot acid rain or sulphur dioxide as well as other impurities in the air are bound to attack the paintwork if not cleaned with sufficient regularity, though in most cases only the horizontal panels surfaces are affected.

In **coastal regions** the high salt content and humidity of the air encourages more rapid corrosion.

In **tropical regions**, ultra-violet radiation is more powerful, atmospheric humidity usually higher and temperatures can reach more than 40 °C in the shade. On light-coloured cars, the painted surfaces can reach up to 80 °C, with darker paintwork even reaching 120 °C in the sun. Lengthy exposure to such conditions can cause the paint to crack, particularly on horizontal panels.

In the case of **mechanical loads** caused by sand, road salt, stone chippings or similar, the paint surface may be broken and corrosion may then be able to develop under the paint, and spread out from the damaged areas.

Awareness of these negative environmental effects on the paintwork has stimulated motor vehicle and paint manufacturers to increase the durability and strength of their paints wherever possible.

The paints used by BMW represent the latest state of technical development in their composition and in the methods used to apply them.

**BMW service stations supply factory-tested Original BMW car care products for all general work of this kind which you intend to carry out yourself.**

### Care of paintwork

As a precaution against the long-term effects of substances which attack the paintwork in areas where air pollution is high (industrial areas, railways) or where natural pollutants are encountered (tree sap or resin, pollen, bird droppings), you are recommended to **wash the car once a week**. In particularly severe cases, the car's body should be washed immediately any such signs of potential damage are detected.

Spilled or overflowing fuel, oil, grease and brake fluid must be **removed immediately** or else they will attack or discolour the paint; the same applies to bird droppings, which will cause local damage to the paint.





**Car wash**

A new BMW can be put through an automatic car wash, or washed by hand, immediately.

However, do not wash the car in the sun, immediately after it has stood in the sun or when the engine compartment lid is still warm, in order to avoid blotches on the paintwork.

If an **automatic car wash** is used, make sure that

- add-on body elements such as spoilers cannot be damaged. If in doubt, consult the car wash operator first.
- the brush pressure must be as low as possible, and the car wash should operate with ample rinsing water.

Modern car washes normally satisfy these requirements.

Before washing the car, it is best to soak and wash off dead insects as far as possible.

Body areas not always reached effectively by the car wash brushes, such as door sills, door seams and panel gaps should be cleaned by hand.

During the winter months in particular, wash the car more frequently. Severe dirt and road salt are difficult to remove and tend to damage the paintwork if not removed promptly.

If the car is **washed by hand**, moisten the dirt on the surface with a finely distributed water spray if possible, and rinse off. Avoid spraying water into the heating and ventilation inlet and outlet apertures.

Next, wash the car down with a sponge, wash glove or similar, using plenty of water which should be warm but not hot, and starting with the roof. Rinse out the sponge at frequent intervals to keep it clean.

Clean the lower body panels and wheels last of all, if possible with a different sponge.

After washing down, spray the car thoroughly and dry it with a clean wash leather to prevent patches from forming.

A **paint protection product**<sup>1)</sup> can be added to the wash water if desired.

If washing with water only is not sufficient, a **car shampoo**<sup>1)</sup> of a type which restores fats to the paintwork can be used in the recommended concentration. Rinse off afterwards with plenty of water.

**Warning:**

**After the car has been washed, the brakes may be damp and therefore less efficient. Dry the brake discs by applying them briefly as soon as the car is driven.**

After washing, residual dirt will be clearly visible. It should be removed without delay, using cleaning-grade benzene or white spirit on a clean cloth or wadding. Clean off tar stains with **tar remover**<sup>1)</sup>. Finally, apply a paint protection product to the treated areas.

For **paint protection**, use only products containing carnauba or synthetic waxes.

A sure sign that the paintwork needs protective treatment is when water no longer forms large droplets and rolls off the surface. Depending on how and where the car is used, this can be the case after only 3 to 4 months.

If the paintwork begins to lose its gloss as a result of insufficient care, it can be treated with a suitable **polish**<sup>1)</sup>. If the paint is already dull or weathered, it should be treated with a **paint cleanser**<sup>1)</sup>. Use **cutting paste**<sup>1)</sup> or similar aggressive products only in severe cases. Remember that polishes, cleansers and pastes all take effect by removing the damaged paint surface and exposing undamaged paint. Surfaces restored in this way should then be carefully protected in order to retain the car's sparkling appearance.

<sup>1)</sup> Available from BMW service stations

**very hot, sunny climate), by erecting a sailcloth cover or similar about 50 to 80 cm (20 to 30 in) above the car's roof.**

Annual cleaning, protection work and repeat treatment as required on the engine, engine compartment, underbody, axles and mechanical assemblies is undertaken by BMW service stations with special equipment. It provides a high degree of **protection against corrosion**, prevents electrical short-circuits and creepage and enables leaks to be detected in good time. This treatment is particularly important at the end of the winter season.

The bumpers, trim strips, wheel covers if fitted and similar exposed items should be washed regularly with water (with a **car shampoo**<sup>1)</sup> added if necessary) and then given protective treatment, particularly if road salt is spread by the authorities in winter.

**Light alloy wheels** should be treated with **wheel cleaner**<sup>1)</sup>, but do not use products which are of an aggressive nature, contain acid or abrasives or are strongly alkaline. Steam jets used to clean the wheels should not reach a temperature of more than 60 °C. (In all cases, comply with the manufacturer's instructions.)

The insides of the windows and the mirror glasses can be cleaned with a **glass cleaner**<sup>1)</sup> which leaves no smears. Never clean mirror glasses with products containing quartz or similar abrasive polishing pastes.

**Plastic parts, imitation leather upholstery or trim, roof linings, light glasses** and parts sprayed with matt black paint must be cleaned with water to which a **car shampoo**<sup>1)</sup> can be added if required. Do not allow the roof lining to become wet right through. If necessary, treat plastic parts with a **plastic cleaner**<sup>1)</sup>. Never use solvents such as nitro thinners, cold cleanser, fuel or similar.

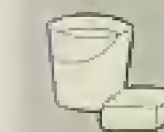
Apart from water, treat **rubber parts** only with **rubber care products**<sup>1)</sup> or **silicone spray**<sup>1)</sup>.

Clean the **wiper blades** with soapy water. They should be renewed twice a year (before and after the winter season).

**Seat belts** should only be cleaned with mild soap suds (without removing them from the car). Do not dry-clean or use chemical products, or the fabric may be weakened.

Never allow automatic seat belts to retract unless they are dry. Dirt on the seat belts can interfere with the action of the reel and represent a safety hazard.

<sup>1)</sup> Available from BMW service stations





**Floor carpets and mats\*** can be cleaned with a **car interior cleaner**<sup>1)</sup> if very dirty. The floor mats can be taken out of the car to enable the interior to be cleaned more thoroughly.

**Real wooden trims and wooden parts** should only be cleaned using a damp cloth. Then rub dry with a second soft cloth.

### Care of upholstery materials

The pressure areas which occur when cloth seats are in regular daily use can be restored by brushing against the pile direction with a slightly moistened brush.

The tendency of the pile to lie in a particular direction on velour upholstery is not a quality defect, and, just as on home textiles or clothing, cannot be avoided.

Remove fluff from cloth upholstery and rubbed-in threads or scraps of cloth or suede with a suitable **fluff roller**<sup>1)</sup> or **burr brush**<sup>1)</sup>. Stains and fairly large areas of dirt should be cleaned off without delay, using lukewarm water and an **interior cleaner**<sup>1)</sup>, **stain remover**<sup>1)</sup> or **cleaning-grade benzene**<sup>1)</sup>. Brush the fabric afterwards to restore its appearance.

Cover the seats if exposed to hot summer sun for lengthy periods, so that the upholstery does not fade.

The build-up of a **static electrical charge** on the seats, particularly if atmospheric humidity is low, can give the occupants an unpleasant electric shock if they touch metal parts of the car **after** leaving it. Although this is not dangerous in any way, it can be avoided by touching a bare or polished metal part of the car **while** getting out.

If necessary, anti-static products can be used to eliminate this effect to a large extent.

### Care of leather

The upholstery leather\* used by BMW is a natural product of the highest quality, processed by the very latest methods, and will retain its fine appearance for many years if correctly treated.

Since leather is an absolutely natural product, its characteristics and certain restrictions on its use and special care precautions must be noted, as grease and dirt could otherwise gradually impair its protective surface.

Regular cleaning and care are needed, since dust and dirt, for instance from the roads, collect in pores and creases, cause severe abrasion and can lead to the leather surface becoming prematurely brittle. You are therefore recommended to remove dust from the leather at regular intervals with a cloth or vacuum cleaner. If any liquids are spilled on the leather upholstery, wipe off immediately.

If exposed to strong sunlight when the car is parked for a lengthy period, leather-upholstered seats should be covered or the windows blanked off to prevent fading.

To clean, slightly moisten a cotton or woollen cloth with water and clean the leather surface without allowing moisture to collect in the seams. Dry and rub down with a clean, soft cloth.

Leather that has become very dirty can be cleaned with a mild detergent containing no brighteners (2 tablespoons in 1 litre of water). Dab grease or oil stains carefully with cleaning-grade benzene, without rubbing them hard.

Do not use saddle soap, cleaning or abrasive agents or any products containing silicone or solvents.

After cleaning, glossy leather surfaces should be treated with a suitable **leather care product**<sup>1)</sup> to protect them and prevent the build-up of a static electrical charge. Shake well and apply a thin coating with a soft cloth. Allow to dry and rub with a clean, soft cloth.

In normal conditions, repeat this treatment every six months.

### Water-buffalo leather\*

For regular care, use only the special **leather spray**<sup>1)</sup> in accordance with the instructions supplied.

Wipe off water droplets immediately, and try to avoid making the water-buffalo leather too wet with clothing in wet weather, or when cleaning.

More severe dirt can be removed with a mild detergent containing no brighteners (2 tablespoons to 1 litre of water).

Water-buffalo leather is left largely in its natural condition and may therefore exhibit slight differences in colour. These and other natural features such as insect bites, creases and a degree of patina after a period of use are perfectly normal and typical of this material.

New water-buffalo leather, if damp, may slightly discolour light clothing.

### Warning:

**Keep cleaning products out of the reach of children. Many products are toxic or flammable, and therefore hazardous in use. Before using any such product, study and comply with the instructions supplied with it, and note any warnings or precautions stated on the pack.**

**When cleaning the car's interior, always open a door or window. Never use products or solvents not specified for cleaning the car.**



<sup>1)</sup> Available from BMW service stations

<sup>1)</sup> Available from BMW service stations



Laying the car up out of use

If the car is to be taken out of use for **more than three months**, have the following maintenance work performed by the BMW service station:

- 1. Cleaning and protective coating (or repeat treatment) of the engine, engine compartment, underbody, axles and mechanical assemblies in accordance with the manufacturer's specifications. Car body wash, interior cleaning and protective treatment of paint and chrome. Cleaning lid and door rubber seals and rubbing them with talcum or glycerine oil.
- 2. Changing the engine oil while warm and renewing the filter element. As an additional engine corrosion protection measure, a corrosion inhibitor can be added to the fuel according to the supplier's instructions.
- 3. Checking coolant level and concentration, and correcting if necessary.
- 4. Checking battery-cell acid level and topping up with distilled water if necessary.
- 5. Draining the windscreen washer system's tank and lines.
- 6. Filling the fuel tank to the brim in order to prevent the formation of moisture condensate.
- 7. Increasing tyre pressures to 4 bar (app. 57 psi).

Immediately before laying up the car, the following work must be carried out:

- 1. Apply the parking brake and the foot brake while the car is in motion, to dry the discs and drums and prevent corrosion.
- 2. Park the car in a dry, well-ventilated indoor area, select reverse gear or automatic transmission position P and chock the wheel to prevent the car from moving. Do not press the parking brake.
- 3. Remove the battery, recharge it and store in a cool place but where there is no risk of frost.

**During the laying-up period**, recharge the battery at intervals of not more than 3 months, or else it will become unserviceable. The battery's operating life is reduced each time it is discharged, especially over longer periods of time.

Licensing

If the car has been registered with the authorities as withdrawn from the road, note the legal limit for re-registration, in order to avoid invalidating the car's general operating permit.  
Comply with national regulations in this respect.

Starting the car up again

Recharge the battery or replace it if necessary.  
Have Inspection I performed by a BMW service station.

Warning:

**Periods of time in which the car's battery is disconnected are disregarded by the service interval indicator when calculating the need for brake fluid renewal.**

**Any such times must be taken into account to ensure that the brake fluid is changed according to schedule every two years, i.e. it will be necessary to change the brake fluid before the clock symbol lights up.**

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Technical data

Engine data, fuel consumption

		BMW 730i/iL		BMW 740i/iL		BMW 750i/iL
Displacement		cm <sup>3</sup>	2997	3982		5379
Number of cylinders			8	8		12
Max. power output		kW	160	210		240
		bhp	218	286		326
– at engine speed		1/min	5800	5800		5000
Max. torque		Nm	290	400		490
– at engine speed		1/min	4500	4500		3900
Compression ratio		ε	10.5	10.0		10.0
Bore/stroke		mm	67.6/84	80/89		79/85
Mixture preparation		Digital Motor Electronics				
Fuel consumption acc. to DIN 70030/1 ECE			5-speed gearbox	Automatic trans.	6-speed gearbox	Automatic trans.
at 90 km/h (56 mile/h)	litres/100 km (Imp. mile/gal)		8.0 (35.3)	7.4 (38.2)	8.5 (33.2)	8.3 (34.0)
at 120 km/h (75 mile/h)	litres/100 km (Imp. mile/gal)		9.6 (29.4)	8.9 (31.7)	9.9 (28.5)	9.8 (28.8)
Urban cycle	litres/100 km (Imp. mile/gal)		14.9 (27.3)	15.1 (18.7)	17.1 (16.5)	16.3 (17.3)
Average	litres/100 km (Imp. mile/gal)		10.8 (26.1)	10.5 (26.9)	11.8 (23.9)	11.5 (24.6)

Note:

Fuel consumption is determined according to standard test methods (DIN 70030/1 ECE). It is not the same as the average fuel consumption, which depends on a great many different factors such as driving style, load, road condition, traffic density and flow, weather, tyre pressures etc.

Engine power output and performance are measured in accordance with the conditions laid down by the valid German industrial standards (DIN), and with the car to standard equipment specification. This standard specifies the permitted tolerances.

Optional extras often have a considerable influence on performance and fuel consumption, since they cause the car's weight or its drag coefficient to vary (roof rack, wider tyres, additional mirrors etc.).

Technical data

Dimensions

		BMW 730i	BMW 730iL	BMW 740i	BMW 740iL
Length	mm (in)	4984 (196.2)	5124 (201.7)	4984 (196.2)	5124 (201.7)
Width	mm (in)	1862 (73.3)	1862 (73.3)	1862 (73.3)	1862 (73.3)
Height (unladen)	mm (in)	1435 (56.5)	1425 (56.1)	1435 (56.5)	1425 (56.1)
Wheelbase	mm (in)	2930 (115.4)	3070 (120.9)	2930 (115.4)	3070 (120.9)
Front overhang	mm (in)	898 (35.4)	898 (35.4)	898 (35.4)	898 (35.4)
Rear overhang	mm (in)	1156 (45.5)	1156 (45.5)	1156 (45.5)	1156 (45.5)
Front track	mm (in)	1552 (61.1)	1552 (61.1)	1552 (61.1)	1552 (61.1)
Rear track	mm (in)	1568 (61.7)	1568 (61.7)	1568 (61.7)	1568 (61.7)
Turning circle (wheels)	m (ft)	10.7 (35.1)	11.3 (37.1)	10.7 (35.1)	11.3 (37.1)
Turning circle (overall)	m (ft)	11.6 (38.1)	12.2 (40.0)	11.6 (38.1)	12.2 (40.0)





Technical data

Dimensions

		BMW 750i	BMW 750iL
Length	mm (in)	4984 (196.2)	5124 (201.7)
Width	mm (in)	1862 (73.3)	1862 (73.3)
Height (unladen)	mm (in)	1425 (56.1)	1425 (56.1)
Wheelbase	mm (in)	2930 (115.4)	3070 (120.9)
Front overhang	mm (in)	898 (35.4)	898 (35.4)
Rear overhang	mm (in)	1156 (45.5)	1156 (45.5)
Front track	mm (in)	1552 (61.1)	1552 (61.1)
Rear track	mm (in)	1568 (61.7)	1568 (61.7)
Turning circle (wheels)	m (ft)	10.7 (35.1)	11.3 (37.1)
Turning circle (overall)	m (ft)	11.6 (38.1)	12.2 (40.0)

Technical data

Weights

		BMW 730i	BMW 730iL	BMW 740i	BMW 740iL
<b>Unladen weight</b> (ready for road, tank full, without optional extras)					
	kg (lb)	1800 (3968)	1825 (4023)	1865 (4112)	–
With automatic transmission	kg (lb)	1830 (4034)	1855 (4090)	1915 (4222)	1940 (4277)
<b>Gross weight limit</b>					
	kg (lb)	2260 (4982)	2285 (5038)	2325 (5126)	–
With automatic transmission	kg (lb)	2290 (5049)	2315 (5104)	2375 (5236)	2400 (5291)
<b>Gross weight limit</b>					
For trailer towing	kg (lb)	2335 (5148)	2360 (5203)	2400 (5291)	–
	kg (lb)	2365 <sup>2)</sup> (5214 <sup>2)</sup> )	2390 <sup>2)</sup> (5269 <sup>2)</sup> )	2450 (5401 <sup>2)</sup> )	2475 <sup>2)</sup> (5456 <sup>2)</sup> )
Front axle load limit	kg (lb)	1145 (2524)	1145 (2524)	1190 (2623)	1190 (2623)
Rear axle load limit	kg (lb)	1250 (2756)	1275 (2811)	1290 (2844)	1310 (2888)
<b>Rear axle load limit</b>					
For trailer towing	kg (lb)	1370 (3020)	1395 (3075)	1410 (3108)	1430 (3153)
<b>Trailer loads</b> acc. to EU operating regulations, incl. nose weight (according to manufacturer's directives and as legally authorized in Germany) <sup>1)</sup>					
unbraked	kg (lb)	750 (1653)	750 (1653)	750 (1653)	750 (1653)
braked, max. gradient 12 % (1 in 8.3)	kg (lb)	1975/2075 <sup>2)</sup> (4354/4575 <sup>2)</sup> )	1975/2075 <sup>2)</sup> (4354/4575 <sup>2)</sup> )	2175 (4795)	2175 (4795)
braked, max. gradient 8 % (1 in 12.5)	kg (lb)	2175 (4795)	2175 (4795)	2175 (4795)	2175 (4795)
Trailer nose weight	kg (lb)	75 (165)	75 (165)	75 (165)	75 (165)
<b>Gross weight limit of car and trailer</b>					
	kg (lb)	4235 (9336)	4260 (9392)	4500 (9921)	–
	kg (lb)	4365 <sup>2)</sup> (9623 <sup>2)</sup> )	4390 <sup>2)</sup> (9678 <sup>2)</sup> )	4550 <sup>2)</sup> (10031 <sup>2)</sup> )	4575 (10086)
Roof load	kg (lb)	100 (220)	100 (220)	100 (220)	100 (220)
Do not exceed either the axle load limits or the car's gross weight limit.					
<b>Luggage capacity</b>					
acc. to VDA test	litres (cu.ft)	500 (17.7)	500 (17.7)	500 (17.7)	500 (17.7)

<sup>1)</sup> Please consult a BMW service station with regard to higher trailer load limits. Different values may apply to national-market versions.

<sup>2)</sup> with automatic transmission





Technical data

Weights

		BMW 750i	BMW 750iL
<b>Unladen weight</b> (ready for road, tank full, without optional extras)			
	kg (lb)	2035 (4486)	2070 (4564)
<b>Gross weight limit</b>	kg (lb)	2495 (5500)	2530 (5578)
<b>Gross weight limit</b> For trailer towing			
	kg (lb)	2570 (5666)	2595 (5721)
<b>Front axle load limit</b>	kg (lb)	1210 (2668)	1220 (2690)
<b>Rear axle load limit</b>	kg (lb)	1345 (2965)	1365 (3009)
<b>Rear axle load limit</b> For trailer towing			
	kg (lb)	1465 (3230)	1470 (3241)
<b>Trailer loads</b> acc. to EU operating regulations, incl. nose weight (according to manufacturer's directives and as legally authorized in Germany) <sup>1)</sup>			
unbraked	kg (lb)	750 (1653)	750 (1653)
braked, max. gradient 12 % (1 in 8.3)	kg (lb)	2175 (4795)	2175 (4795)
braked, max. gradient 8 % (1 in 12.5)	kg (lb)	2175 (4795)	2175 (4795)
<b>Trailer nose weight</b>	kg (lb)	75 (165)	75 (165)
<b>Gross weight limit of car and trailer</b>			
	kg (lb)	4670 (10295)	4695 (10351)
<b>Roof load</b> Do not exceed either the axle load limits or the car's gross weight limit.			
	kg (lb)	100 (220)	100 (220)
<b>Luggage capacity</b> acc. to VDA test			
	litres (cu.ft)	500 (17.7)	500 (17.7)

<sup>1)</sup> Please consult a BMW service station with regard to higher trailer load limits. Different values may apply to national-market versions.

Technical data

Performance

		BMW 730i/iL	BMW 740i/iL	BMW 750i/iL
<b>Top speed</b> With automatic transmission				
	km/h (mile/h)	235 (146) 234 (145)	250 <sup>1)</sup> (155 <sup>1)</sup> 250 <sup>1)</sup> (155 <sup>1)</sup>	— 250 <sup>1)</sup> (155 <sup>1)</sup>
<b>Acceleration</b>				
from 0 – 50 (0–31) km/h (mile/h)	s	2.8/3.7 <sup>2)</sup>	2.5/3.1 <sup>2)</sup>	2.7 <sup>2)</sup>
0 – 80 (0–50) km/h (mile/h)	s	5.9/7.1 <sup>2)</sup>	5.1/5.4 <sup>2)</sup>	4.8 <sup>2)</sup>
0 – 100 (0–62) km/h (mile/h)	s	8.3/9.7 <sup>2)</sup>	6.9/7.4 <sup>2)</sup>	6.6 <sup>2)</sup>
0 – 120 (0–75) km/h (mile/h)	s	11.8/13.0 <sup>2)</sup>	9.6/10.0 <sup>2)</sup>	8.8 <sup>2)</sup>
80 – 120 km/h (50 – 75 mile/h) in 4th gear	s	9.9	7.4	—
Standing-start kilometre	s	29.2/30.3 <sup>2)</sup>	26.9/27.6 <sup>2)</sup>	26.6 <sup>2)</sup>

<sup>1)</sup> governed

<sup>2)</sup> with automatic transmission





Filling capacities	Litres (Imp. units)	Note
Fuel tank Including reserve of	app. 85/95 <sup>1)</sup> (18.7/20.9 <sup>1)</sup> gal) app. 10 (2.2 pints) – BMW 730i/iL, 740i/iL app. 12 (21.2 pints) – BMW 750i/iL	Fuel grade: see Page 18
Windscreen washer Including headlight cleaning system Intensive cleaning system	app. 4.5 (7.9 pints) app. 6.0 (10.6 pints) app. 1.0 (1.8 pints)	For further details, see Page 95
Cooling system, incl. heater circuit	12.0 (21.1 pints) – BMW 730i/iL, 740i/iL 13.0 (22.9 pints) – BMW 750i/iL	For further details, see Page 94
Engine with filter renewal	7.5 (13.2 pints) – BMW 730i/iL, 740i/iL 8.0 (14.1 pints) – BMW 750i/iL	Brand-name HD oil for spark-ignition engines Oil grades: see Page 92
Manual gearbox	1.2 (2.1 pints) – BMW 730i/iL 1.7 (3.0 pints) – BMW 740i	ATF <sup>2)</sup>
Automatic transmission	–	Permanently filled without oil changes
Final drive	1.4 (2.5 pints) – BMW 730i/iL 1.6 (2.8 pints) – BMW 740i/iL, 750i/iL	Brand-name hypoid gear oil <sup>2)</sup>

<sup>1)</sup> with self-levelling suspension  
<sup>2)</sup> BMW service stations are familiar with the correct grades

Gear ratios

Manual gearbox

	BMW 730i/iL	BMW 740i
1st	4.20	4.23
2nd	2.49	2.51
3rd	1.66	1.67
4th	1.24	1.23
5th	1.00	1.00
6th	–	0.83
Rev.	3.89	3.75

Automatic transmission

	BMW 730i/iL	BMW 740i/iL, 750i/iL
1st	3.67	3.55
2nd	2.00	2.24
3rd	1.41	1.54
4th	1.00	1.00
5th	0.74	0.79
Rev.	4.08	3.68

Electrical system

**Battery** 12 Volt, 92 Amp/h  
or 12 Volt, 110 Amp/h<sup>1)</sup>  
<sup>1)</sup> depending on equipment options

**Firing order**  
BMW 730i/iL, 740i/iL 1-5-4-8-6-3-7-2  
BMW 750i/iL, 1-7-5-11-3-9-6-12-2-8-4-10

**Ignition timing**  
On cars with Digital Motor Electronics engine management, the ignition timing is programmed and cannot be adjusted manually.

**Alternator**  
with built-in voltage regulator  
BMW 730i/iL, 740i/iL 100 Amp, 1400 Watts  
BMW 750i/iL 140 Amp, 1960 Watts

**Spark plugs**  
**BMW 730i/iL, 740i/iL**  
Double-earth electrode: Bosch F7 LDCR  
or NGK BKR 6 EK  
**BMW 750i/iL** Bosch F9 LCR  
Electrode gap 0.8 + 0.1 mm

V-belts

**BMW 730i/iL, 740i/iL**  
**Water pump, alternator and power steering**  
Ribbed 7 K x 1605 mm  
**Air conditioning compressor**  
Ribbed 5 K x 980 mm  
**BMW 750i/iL**  
**Alternator and power steering**  
Ribbed 7 K x 1035 mm  
**Water pump and air conditioning compressor**  
Ribbed 6 PK x 1195 mm













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